BOROUGH OF LEICESTER.

SIXTIETH

ANNUAL REPORT

UPON THE

HEALTH OF LEICESTER,

For the Year 1908,

BY

C. KILLICK MILLARD, M.D., D.Sc.,

Medical Officer of Health; Medical Superintendent of the Borough Isolation Hospital; Public Analyst for the Borough.

ALSO

REPORTS on the INFANTS' MILK DEPOT and ISOLATION HOSPITAL, and the REPORTS of the PUBLIC ANALYST, the CHIEF INSPECTOR, the FOOD INSPECTORS, and the SUPERINTENDENTS of the REFUSE DISPOSAL and STREET CLEANSING DEPARTMENTS.

Leicester
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BOROUGH OF LEICESTER.

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Health Visitors:

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Disinfecting Men:

J. C. PARK. G. GLOVER.

Matron of Isolation Hospital:

Miss E. DAVIES.

Resident Medical Officer, Isolation Hospital:

JAMES FAIRLEY, M.B.

Succeeded by

C. H. COX, B.A., M.R.C.S.

(Also appointed Assistant Medical Officer of Health).

Medical Officer of Health and Public Analyst:

C. KILLICK MILLARD, M.D., D.Sc.

* Holds Certificate of the Sanitary Institute.

TABLE OF CONTENTS.

PART I.—Statistical.

PAGE.
Population 11
Inhabited Houses 12
Rateable Value 12
Marriages 12
Births and Birth-rate 13
Deaths and Death-rate 14
Death-rates of other Great Towns 15
Causes of Death during 1908 16
Age Distribution of Deaths 18
Infant Mortality 18
Deaths of Infants in Successive Months 20
Mortality amongst Illegitimate Infants 21
Zymotic Mortality 21
Ward Statistics 22

PART II. Zymotic Diseases.

Smallpox 25
Vaccination 25
Scarlet Fever 27
Diphtheria 28
Enteric Fever 29
Enteric Fever and Mussels 30
Measles 33
Whooping Cough 38
Erysipelas 38
Puerperal Fever 39
Diarrhœa 39
Phthisis 39

PART III.—General.

Factory and Workshops Act 53
Midwives Act 54
Notification of Births Act 56
Disinfection 57
Alcohol and Public Health 57
Poverty and Public Health 58
Houses Unfit for Habitation 58
Slaughter Houses 59
Public Baths 59
Water Supply 59
Sewage Disposal 60
Workmen's Compensation Act 61
Leicester Health Society 62
Cremation 63
Kissing the Book 64
House Flies and Disease 64
Medical Inspection of School Children 65
Leicester Corporation Act, 1908 67
Children Act, 1908 67

APPENDICES.

I.—Report on the Infants' Milk Depot 69
II.—Report on the Isolation Hospital 75
III.—Report of the Public Analyst 85
IV.—Report of the Chief Inspector 89
V.—Report of the Food Inspectors 99
VI.—Report of the Refuse Disposal Department 101
VII.—Report of the Street Cleansing Department .. 105
VIII.—Statistical Tables (*see* List on Next Page) 109
INDEX 151

LIST OF TABLES.

APPENDIX VIII. PAGE

Table I. Municipal Wards, Area, Houses and Population 111
,, II. Municipal Wards, Zymotic, Diarrhœa, and Phthisis Rates 112
,, III. Municipal Wards, Births, Deaths, and Deaths under One 113
,, IV. Municipal Wards, Death, Birth, and Infant Rates 114
,, V. Deaths from Zymotic Diseases 115
,, VI. Vital Statistics of the Great Towns in 1908 116
,, VII. Weekly Temperature of Earth during 1908 118
,, VIII. Weekly Deaths from Diarrhœa during 1908 119
,, IX. Vital Statistics of Leicester in past years 120
,, X. Number of Deaths from certain specified causes 122
,, XI. Number of Notifications from Zymotic Diseases in 1908 ... 123
,, XII. Number of Deaths from Zymotic Diseases, 1896-1908 ... 124
,, XIII. Number of Inhabited Houses, Marriages, Births, Deaths, Zymotic Deaths, and Deaths in Institutions 125
,, XIV. Death-rates of Children 126
,, XV. Infant Mortality from chief Infantile Diseases 127
,, XVI. Deaths, Death-rates and Percentages of Deaths from Principal Groups of Diseases 128
,, XVII. Enteric Fever: Cases and Deaths in past years 129
,, XVIII. Occupations of Persons in Leicester... 130
,, XIX. Vaccinations Registered and Exemptions Granted... ... 132
,, XX. Deaths from Tubercular Diseases 133
,, XXI. Age, Sex, and Occupation of Phthisis Deaths 134
,, XXII. Deaths from Phthisis in each Ward 135
,, XXIII. Scarlet Fever Statistics, 1877—1908. 136
,, XXIV. Measles Statistics 137
,, XXV. List of Midwives 138
,, XXVI. Infant Mortality classified in Weeks and Months 139
,, XXVIA. Ditto (abridged) 140
,, XXVII. Age Periods of Persons Living 141
,, XXVIII. Phthisis Cases, Family History 142
Mortality Table: Classification of Deaths in 1908 according to cause ... 143

TABLES IN HOSPITAL REPORT.

Table A. Number of Patients Admitted to Hospital for different Diseases in 1908 80
,, B. Number of Patients and Days in Hospital 81
,, C. Hospital Expenditure 82
,, D. Cost per Patient 83
,, E. Details of Fuel used at Isolation Hospital 84

SUMMARY OF STATISTICS

For the Year 1908.

BOROUGH OF LEICESTER.

Population (estimated) at Mid-year 1908	240,172

Population at Census, 1901, 211,581.

Marriages	1,788
Marriage-rate	14·88
Births	5,680
Birth-rate	23·64
Deaths (corrected for Institutions)	3,119
Death-rate	12·98
Infant Mortality (per 1,000 births)	129·7
Zymotic-rate	1·51
Diarrhœa-rate	·50
Phthisis-rate	1·19

76 GREAT TOWNS.

	Average
Birth-rate	27·0
Death-rate	14·9
Zymotic Death-rate	1·59
Infant Mortality	128

LEICESTER.

Area of Borough (in acres)	8,586
Rateable value for year 1908-9	£1,102,560
Assessable value	£1,068,183
Penny in £ produced	£4,004
Number of persons per acre at Census, 1901	24·6
Number of persons per House at Census, 1901	4·6
Number of Inhabited Houses, July, 1908	49,174
Number of Empty Houses, July, 1908	3,118

Borough extended in year 1891.

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TOWN HALL, LEICESTER,

April, 1909.

To the Chairman and Members of the Sanitary Committee.

Gentlemen,

I have the honour to present to you my Annual Report on the Health of Leicester for the year 1908.

The retrospect is, on the whole, a satisfactory one, the death-rate being only 12·98 *per* 1,000, *which, although a fraction higher than the rate for the previous year, is, with that exception, the lowest on record.*

A comparison with other great centres of population continues to be very favourable to Leicester. Only two of the towns with populations of over 100,000*—viz., Croydon and Southampton—had lower death-rates for* 1908 *; whilst, if the comparison be extended to the ten years,* 1898-1907, *only one of those towns, viz., Croydon, had a lower average rate.*

For the first time for several years, the birth-rate shows a slight increase.

Infant Diarrhœa was again much less fatal than usual during the summer, and the rate of infant mortality was the lowest on record.

Scarlet Fever, though still too prevalent, showed a substantial decrease as compared with the previous year.

On the other hand, there was an excessive number of deaths from Measles, a severe visitation of this disease having occurred in the last quarter of the year.

The subject of Phthisis has been dealt with in some detail, this disease continuing to carry off nearly 300 *persons in Leicester every year.*

Under the heading of Enteric Fever some observations are made as to the possibility of infection being carried through the eating of mussels.

The Infants' Milk Depot continues to do good work, and is reported upon separately in Appendix I.

All the principal Statistical Tables have been grouped together, and will be found in Appendix VIII. A few fresh Tables have been added.

My best thanks are due to Chief Inspector Braley, and to the members of the Sanitary and Hospital Staffs for loyal co-operation and assistance. Also to the members of the Sanitary Committee for the courtesy and consideration which they have invariably extended to me; and more especially to Ald. Thomas Windley, who has now been Chairman of that Committee for thirty-three years, and of whose ripe judgment and mature experience I have so frequently availed myself.

I am, Gentlemen,

Your obedient Servant,

C. Killick Millard

Medical Officer of Health.

Medical Officer of Health's Report

FOR THE YEAR 1908.

PART I.

STATISTICAL.

POPULATION.

The population of the Borough of Leicester for the year 1908, as estimated by the Registrar General, was 240,172, and it is upon this basis that the vital statistics for the year have been calculated.

As, however, it is seven years since the last census, it is possible that the Registrar General's estimate (which is based upon the rate of increase in the Borough in the last intercensal period) is somewhat wide of the truth, and in view of the trade depression which has existed, and the stagnation in the building trade, it is probably too high.

Under these circumstances an estimate of the population, based upon the number of inhabited houses, is more likely to be reliable. On July 1st, 1908, according to a return made by the Overseers, the number of inhabited houses in Leicester was 49,174.* Multiplying this by 4·6—the number of persons per house at the last census (a figure which is not likely to have materially changed)—we get 226,200, or 13,972 less than the Registrar General's estimate.

Such a difference in population represents about 0·8 per 1,000 in calculating birth or death rates, so that if the population of the Borough be really this much less than the Registrar General's estimate, it follows that the birth and death-rates and other rates based on population are all 0.8 per 1,000 too low.

The *Natural Increase* in the population, or excess of births over deaths, was 2,561.

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* For the number of inhabited houses in each Municipal Ward, see Table I.

The following figures, showing the population of the Borough at each Census during the past century, indicate the remarkable growth in size and importance of Leicester :—

Year.	Population.	Increase.	Percentage Increase.
1801	17,005		
1811	23,146	6,141	36·1
1821	31,036	7,890	34·1
1831	38,904	7,868	25·3
BOUNDARIES EXTENDED IN 1836.			
1841	50,806	11,902	30·6
1851	60,584	9,778	19·2
1861	68,052	7,468	12·3
1871	95,220	27,168	39·9
1881	122,376	27,156	28·5
BOUNDARIES EXTENDED IN 1891.			
1891	174,624	52,248	42·7
1901	211,579	36,955	21·2

INHABITED HOUSES.

The number of inhabited houses at the middle of 1908, as already stated, was 49,174. This is an increase of 349 upon the number at the corresponding period of 1907.

The number of *Empty* Houses and Cottages on July 1st, 1908, was 3,118, compared with 3,198 at the corresponding period of 1907, and with 2,987 in 1906.

RATEABLE VALUE.

The rateable value of the Borough for the year 1908-9 was £1,102,560, the assessable value £1,068,183, and a penny in the pound produced £4,004.

MARRIAGES.

The number of marriages solemnised during the year was 1,788, equivalent to a *Marriage-rate* of 14·88. This is the lowest rate hitherto recorded. Although bad trade may have contributed to this result, it is probable that the principal cause lies much deeper.

As will be seen from the following figures, the marriage-rate (like the birth and death-rate) has been steadily declining for a very long time.

MARRIAGE-RATES.

Quinquennial Average.		Quinquennial Average.	
1866—1870	22·41	1886—1890	16·62
1871—1875	22·84	1891—1895	16·96
1876—1880	20·44	1896—1900	17·39
1881—1885	18·00	1901—1905	16·51
1906	15·32		
1907	15·64		
1908	14·88		

BIRTHS.

The number of births registered during 1908 was 5,680* ; of these 2,869 were males and 2,811 were females. This number is 146 greater than in the previous year, this being the first time for six years that the births have not shown a decrease.

The *Birth-rate* was 23·64 per 1,000 population. This is a fractional increase on the rate for 1907 (viz., 23·43), which was the lowest on record.

In this respect the birth-rate for Leicester has conformed to the average rate for the whole country, which also showed a fractional increase in 1908 over the previous year, when it reached the lowest point on record.

In the Report for 1907 it was pointed out that as regards the country generally, it was estimated by the Registrar General that 15 per cent. of the decline in the birth-rate, which has taken place in the past thirty years, was due to a diminution in the proportion of married women of child-bearing age, and another 7 per cent. to the decrease in illegitimacy. The proportion of marriages amongst marriageable persons in the general population has decreased since 1876 in the proportion of 108 to 93.

The number of *illegitimate* births was 227, or 4 per cent. of the total births. This is a little higher than in the preceding three years, and represents a slight check to the improvement which seemed to be taking place. The serious question of the mortality amongst illegitimate infants is referred to below.

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* This includes 74 births at the Poor Law Infirmary which is just outside the Borough Boundary.

DEATHS.

The number of deaths of residents of Leicester after correcting for Public Institutions* was 3,119, of which 1,598 were males, and 1,521 were females.

The *Death-rate* was 12·98† (practically 13·0) per 1,000 population, which is a fraction higher than the rate (12·65) for the year 1907, which was the lowest on record.

The following table shows the remarkable reduction which has been effected in the general death-rate of Leicester during the past thirty-seven years :—

Quinquennial Period.	Average Death-rate.
1872—1876	25·18
1877—1881	22·85
1882—1886	20·07
1887—1891	18·58
1892—1896	17·31
1897—1901	17·40
1902—1906	14·18
1907	12·65
1908	12·98

If the same rate of mortality had continued as prevailed in the five years, 1872-6—viz., 25·18 per 1,000—there would have occurred in Leicester last year no less than 6,043 deaths, instead of only 3,119 ; so that the reduced death-rate is equivalent to a saving of nearly 3,000 lives annually !

Such an achievement is indeed cause for satisfaction, and although some of the reduction is no doubt attributable to the improved conditions of life generally amongst the poorer classes, it must be very gratifying to all those who have devoted their time and ability, on the Sanitary and other Committees of the Town Council, in the endeavour to make Leicester a healthy and sanitary town.

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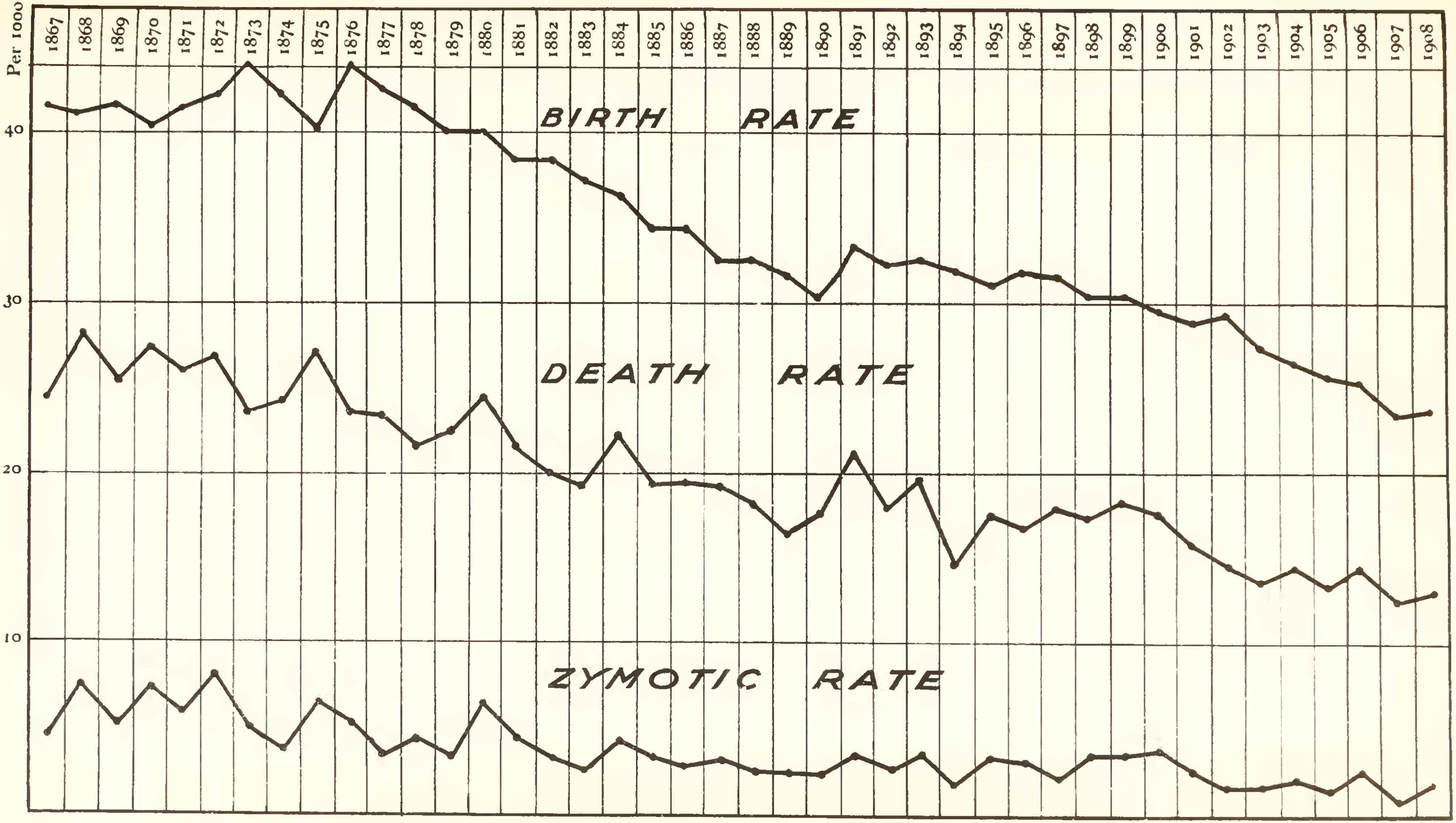
* Thirteen deaths of inmates of the County Asylum (prior to the removal of the latter out of the Borough), and 78 of the deaths occurring at the Leicester Infirmary, have been deducted from the deaths registered in Leicester, the deceased not being residents of Leicester ; whilst 36 deaths of patients at the Borough Isolation Hospital, and 322 deaths at the Poor Law Infirmary have been added, these institutions being outside the Borough though belonging to the Borough.

† If calculated on the revised population as estimated from the number of inhabited houses (see p. 11), the death-rate would work out at 13·78, which is still a very low figure. The Registrar General's figure for the 53 weeks ending January 2nd, 1909, is 13·00.

DIAGRAM SHOWING BIRTH AND DEATH-RATES IN LEICESTER

for the 42 Years—1867-1908.



In this connection a unique fact in the sanitary history of Leicester may be mentioned. During the period referred to above, there has been a succession of Medical Officers of Health :—Drs. Crane, Johnston, Tomkins, Priestley, Monk, and (since 1901) the present writer ; but for the past thirty-three years there has only been a single Chairman of the Sanitary Committee.

Alderman T. Windley first joined the Leicester Town Council in 1872, two years before the Sanitary Committee was formed. He was elected Chairman of this Committee in 1876, and he has been re-elected each succeeding year. Since the death last year of Alderman Sir Wm. Cook, who for thirty-three years occupied the position of Chairman of the Health Committee of the Birmingham City Council, Alderman Windley has become the *doyen* of Municipal Sanitarians : but it is not so much mere length of service which calls for comment, remarkable though it is, as the combination of this with the splendid record referred to above. May the Alderman be spared in health and strength to continue the good work he has carried on so long ; and may he preserve unimpaired, as at present, the full use of all his faculties, combined with that wonderful grasp of detail which has rendered his Chairmanship so effective.

DEATH-RATES IN OTHER GREAT TOWNS.

Leicester again compares very favourably as regards her general death-rate with other great centres of population. In Table VI will be found the principal vital statistics for the 33 great towns with populations of over 100,000, together with the average death-rate for the ten years, 1898-1907. From this it will be seen that the only great towns with a lower death-rate in 1908 than Leicester were Croydon and Southampton. Whilst, if the comparison be extended to the ten years, it appears that the only great town with a lower average death-rate* than Leicester was Croydon with a rate of 13·4. Leicester, Derby, and Southampton draw a tie for the second place with 15·4.

In this connection, the possibility of the population of Leicester having been somewhat over-estimated during the past few years —and the death-rate in consequence having been slightly under-estimated—must be borne in mind, but the error, if any, would be too small to make any considerable difference.

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* This is corrected for institutional deaths only, not for age and sex.

CAUSES OF DEATH DURING 1908.

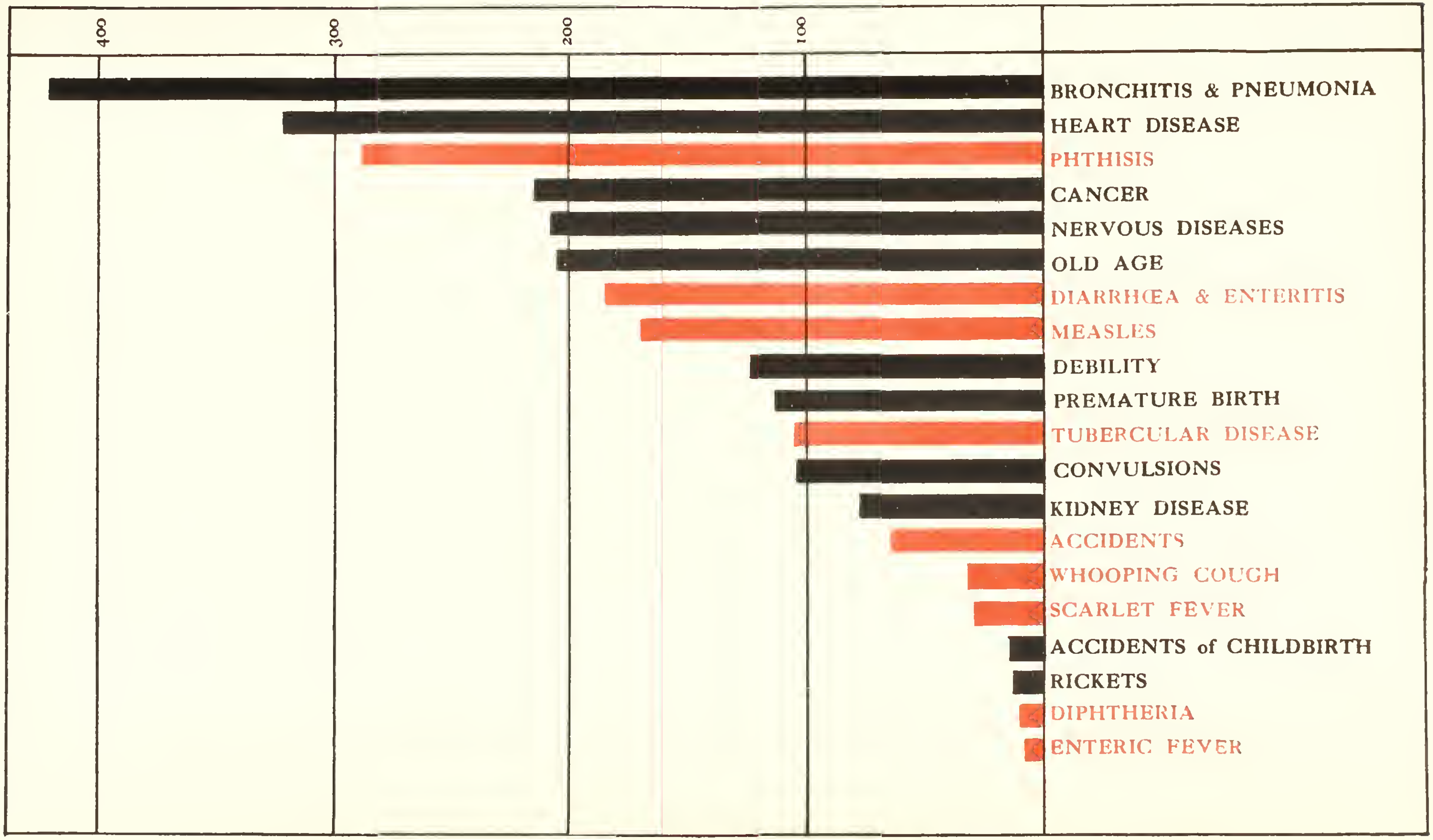
The number of deaths caused by the principal diseases, or causes of death during the year, is set out below. The " preventable " causes are underlined.

	No. of Deaths.
Bronchitis and Pneumonia	422
Heart Disease	321
Phthisis	287
Cancer and Malignant Disease	214
Diseases of the Nervous System	208
Old Age	205
Diarrhœa and Enteritis	183
Measles	167
Inanition and Debility	121
Premature Birth	113
Tubercular Diseases (other than Phthisis)	104
Convulsions	103
Diseases of the Kidneys	77
Accidents	62
Whooping Cough	30
Scarlet Fever	29
Accidents of Childbirth	14
Rickets	13
Diphtheria	9
Enteric Fever	8
All other causes	429
Total	3,119

Many of the diseases not usually regarded as " preventable," are undoubtedly to a large extent amenable to external conditions, and therefore to some extent preventable, *e.g.*, bronchitis and pneumonia, diseases of nervous system, inanition and debility, premature birth, rickets, &c.

Phthisis, tubercular diseases, diarrhœa, cancer, convulsions, diseases of the kidneys, whooping cough, and particularly measles, all showed an increase on the previous year, the last-mentioned disease jumping up from 60 to 167. On the other hand, bronchitis and pneumonia, heart disease, diseases of the nervous system, premature birth, scarlet fever, and diphtheria, showed a decrease.

DIAGRAM showing DEATHS from the principal causes during the year 1908. "Preventable" causes are shown in red.



CANCER AND MALIGNANT DISEASES.

The number of deaths from cancer has been on the increase throughout the whole country during the last half century, and Leicester is no exception, the year 1908 marking a further increase, as shown below. As the total number of deaths from all causes has been decreasing, the *proportion* of deaths due to cancer has increased even more. Although cancer is much more common in women than in men, the increase that is occurring is greater amongst men.

The increase in cancer deaths is not quite so serious as the figures given below suggest, for cancer is essentially a disease of the latter half of life, and owing to the reduced death-rate, the proportion of middle aged and elderly people in the population is increasing. Allowing, however, for this factor, there remains a real and serious increase which has not yet been accounted for.

DEATHS FROM CANCER AND MALIGNANT DISEASE.

Period.	Average Number of Deaths Annually.	Rate per 1000 Population.	Percentage of Total Deaths.
1888—1892	75	·486	2·6
1893—1897	119	·623	3·5
1898—1902	145	·693	4·2
1903—1907	190	·833	6·0
1908	214	·891	6·8

PREMATURE BIRTH.

One of the most serious features in the vital statistics of the nation during recent years has been the tendency to increase in the number of deaths due to premature birth. How far this should be regarded as the outcome of social conditions, *e.g.*, the employment of married women in factories, is uncertain, but it certainly indicates unfavourable pre-natal conditions.

It is satisfactory, therefore, to note that the year under review showed an improvement; the deaths due to premature birth, expressed as a proportion of the total births, being only 19·8 per 1,000, as compared with an average during the previous five years of 23·9.

AGE DISTRIBUTION OF DEATHS.

Questions are sometimes asked as to whether the number of old people living in Leicester is increasing, and whether the proportion of deaths of old people to total deaths is increasing.

The following figures have accordingly been obtained :—

Number of Persons Living.

	60—80 years.		Over 80 years.	
	No. of Persons.	Percentage of Total Population.	No. of Persons.	Percentage of Total Population.
Census, 1891 ..	9,563	5·4	576	·33
Census, 1901 ..	12,057	5·6	818	·38

Number of Deaths.

Year.	60—80 years.		Over 80 years.	
	No. of Deaths.	Percentage of Total Deaths.	No. of Deaths.	Percentage of Total Deaths.
1898	632	18·1	141	4·0
1903	662	21·5	162	5·2
1908	750	24·0	202	6·4

From the above figures it is seen that the proportion of old people in the population is slightly increasing, and the proportion of deaths of old people is considerably increasing. This is not surprising or difficult to explain. For many years both the birth-rate and the death-rate in Leicester have been steadily falling, with the result that fewer young lives are coming into the population, whilst people are living longer and more people are growing old and dying old.

INFANT MORTALITY.

The number of deaths of infants under one year of age was 737, of which 421 were of males, and 316 of females. The excess of deaths of male as compared with female infants is larger than usual.

The rate of *Infant Mortality*—or proportion of infant deaths to children born—was 129·7 per 1,000 births, which is the lowest rate on record, being a fraction lower than the rate for 1907, which was 130·1. This is all the more satisfactory as the summer of 1908 was not cool and wet, as was that of 1907, and the meteorological conditions were presumably not quite so favourable to a low infant death-rate.

The experience of the past year, therefore, supports the belief that the conditions of infant life in Leicester are continuing to improve.

Period.	Average Infant Death-rate per 1 000 births.
1892—1896	194·4
1897—1901	189·2
1902—1906	158·1
1907 ..	130·1
1908 ..	129·7

It is reasonable to believe that the operations of the Infants' Milk Depot, the visits of the Health Visitors, and the other measures which have been adopted are contributing to this result.

The following table shows the deaths of infants per 1,000 births from the principal causes of infant mortality :—

Period.	Atrophy and Debility.	Diarrhœa.	Convulsions.	Lung Diseases.	Premature Birth.	Tubercular Diseases.	Measles.	Whooping Cough.	Other Causes.	Total.
5 years 1896-1900	27·7	41·9	20·4	30·6	21·4	7·9	3·5	4·7	32·3	190·4
5 years 1901-1905	29·0	28·4	16·6	21·5	22·7	9·8	2·3	5 3	26·2	161·8
1906	21·7	38·0	13·5	19·3	26·6	5·3	4·1	8·9	28·6	166·3
1907	20·2	11·9	13·0	22·5	21·0	6·5	2·1	1·6	28·0	130·1
1908	**19·8**	**18·1**	**15·1**	**15·4**	**19·8**	**5·4**	**5·9**	**3·3**	**26·9**	**129·7**

Not only do the infant deaths, expressed as a proportion of the births, tend to diminish, but also if expressed as a proportion of the total deaths.

Period.	Average Annual Deaths under 1 year per 1000 deaths at all ages.
1893—1897	361
1898—1902	317
1903—1907	288
1908	236

DEATHS OF INFANTS IN SUCCESSIVE MONTHS DURING FIRST YEAR OF LIFE.

In studying the question of infant mortality it is desirable to classify the deaths according to the age in months of the infant. This has been done in Table XXVI, and Table XXVI (a) is an abridged and simpler form of the same.

From these tables it is seen that no less than 28 per cent. of all infant deaths take place during the first month of life, but this high proportion is largely accounted for by the fact that more than half of these deaths (115 out of 212) are due to premature birth or congenital defects. Dividing the first year of life into months, we find :—

	Percentage of Deaths.
Under 3 months	50
3 to 6 ,,	20
6 to 9 ,,	18
9 to 12 ,,	12
	100

It is clear, therefore, that the risk of death decreases with the age of the infant, and especially after the first nine months.

A very large proportion of the deaths of infants must be looked upon as essentially preventable, *e.g.*, most of the deaths from wasting diseases, diarrhœal diseases, convulsions, bronchitis, and pneumonia.

The deaths of infants attributed to *Atrophy and Debility* were below the average, viz., 20 per 1,000 births as compared with 25 for the previous five years.

MORTALITY AMONGST ILLEGITIMATE INFANTS

The mortality amongst illegitimate infants is always much higher than amongst those born in wedlock. The contrast, however, revealed by the following figures—which show the relative mortality amongst legitimate and illegitimate infants during the past eight years—is so terribly great that one is driven to the conclusion that only deliberate neglect in many cases can account for it.

Year.		Legitimate Infant Mortality.		Illegitimate Infant Mortality.
1901	..	172	..	348
1902	..	148	..	340
1903	..	159	..	213
1904	..	155	..	318
1905	..	139	..	295
1906	..	154	..	486
1907	..	122	..	377
1908	..	123	..	291

Dividing the above period into two periods of four years, and calculating the average rates, we find as follows :—

Period.		Average Mortality among Legitimate Infants.		Average Mortality among Illegitimate Infants.
1901-4	..	158	..	305
1905-8	..	135	..	357

It is evident, therefore, that whilst the mortality amongst legitimate infants is decreasing, the mortality amongst illegitimates has, during the past four years as compared with the preceding four years, shown a decided increase, and has been *more than two and a half times* as great as the mortality amongst legitimate infants.

These sinister facts may be commended to the notice of our energetic Borough Coroner.

ZYMOTIC MORTALITY.

There were 363 deaths from the seven principal zymotic diseases, viz. :—

Smallpox ..	..	..	..	*Nil*
Measles ..	..	..	..	167
Scarlet Fever	..	..	..	29
Diphtheria ..	..	..	..	9
Whooping Cough	..	..	..	30
Enteric Fever	..	..	..	8
Diarrhœa ..	..	..	..	120
				363

This is equivalent to a *zymotic death-rate* of 1·51 per 1,000 population. Although the number of zymotic deaths was considerably higher than in 1907, owing to the large number of deaths from measles, it compares favourably with previous years, owing to the number of deaths from diarrhœa having been much less than usual.

The zymotic rate for the 76 Great Towns in 1908 was 1·59.

WARD STATISTICS.

(Tables I to V.)

POPULATION.

This has been estimated from the number of inhabited houses at the middle of the year. The chief increase has taken place in Knighton Ward (Clarendon Park district) where the number of inhabited houses had increased by 349 as compared with the previous year.

BIRTH-RATES.

The highest birth-rate occurred in Wyggeston Ward, viz., 32·0; Latimer, Belgrave, and West Humberstone coming next in order. The lowest rate was 11·5, in De Montfort Ward. This ward usually has a very low birth-rate.

DEATH-RATES.

For once Knighton Ward has had to yield the palm for the lowest death-rate to Westcotes, which secures the place of honour with a rate of 7·4 per 1,000. Knighton comes second with 9·2. Next in order of merit comes Aylestone, with the highly creditable rate (for a working class neighbourhood) of 10·3, followed by Spinney Hill with 10·8.

At the other extreme we find Newton Ward, as so often before, with the highest rate, viz., 20·7; followed by Wyggeston with 19·5, and St. Margaret's with 17·5.

INFANT MORTALITY.

The highest infant mortality also occurred in Newton Ward, viz., 239 per 1,000 births, whilst St. Martin's, Wyggeston, and St. Margaret's came next.

The lowest rate was in Knighton Ward, viz., 60, followed by Spinney Hill with 87. These great contrasts are very significant, and indicate how much room there is for improvement in certain parts of the town.

ZYMOTIC DEATHS.

Although the epidemic of measles was very wide-spread, it was far more fatal in the four Wards, Newton, St. Margaret's, Wyggeston, and Latimer, than in other districts. Thus, out of the total 167 deaths caused by this disease in the whole town, no less than 106 occurred in these four wards. This is equivalent to a rate of 2·00 per 1,000 population, as against only ·35 per 1,000 for the rest of the Borough; or in other words the mortality from measles was five times as high in these four wards as in the remainder of the town.

Diarrhœa also caused a much higher death-rate in these same wards than elsewhere; whilst it caused no deaths in De Montfort, and only a single death in Knighton.

PHTHISIS.

The relative incidence of phthisis upon the different wards is shown in Table II. The highest rates were Wyggeston, 2·1; Newton, 1·8; and Wycliffe and Aylestone, 1·7. The lowest rates were De Montfort, 0·4; Knighton, 0·5; West Humberstone, 0·7; and Spinney Hill, 0·8.

In Table XXII the average annual mortality from phthisis in each ward is given for the past ten years.

PART II.

ZYMOTIC DISEASES.

SMALLPOX.

During 1908 the whole country continued very free from this disease, and there was no serious epidemic anywhere. No cases occurred in Leicester. At the time of writing (March, 1909), a slight outbreak of the disease has occurred at Bristol, and there have been a few cases elsewhere.

VACCINATION.

The following figures show the number of vaccinations registered and the "exemptions" granted during 1908 :—

	Public.	Private.	Total Vaccinations.	Exemptions Granted.
First Quarter	55	113	168	703
Second Quarter	32	120	152	570
Third Quarter	49	131	180	596
Fourth Quarter	25	134	159	532
Total	161	498	659	2401

These figures show a decrease in the number of vaccinations, as compared with the previous year, of 434, or 40 per cent. ; whilst the exemptions granted show an increase of 1,145, or 91 per cent.

This striking change is, of course, easily explained as the result of the new Vaccination Act, which came into force in 1908, and under which it is only necessary for the parent to make a statutory declaration of his objection to vaccination, in order to obtain his exemption, the necessary procedure being thus greatly facilitated.

In proportion to the total births registered during the year, the vaccinations amounted to 11·6 per cent., and the exemptions to 42·2 per cent.

The number of vaccinations and exemptions in previous years is given in Table XIX.

As a consequence of the passing of the new Act there has been a decrease in infant vaccinations in the country generally. Practically, compulsory vaccination has been all but abolished. There are grounds for believing that this is causing less consternation amongst orthodox sanitarians than would have been the case a few years ago, and that this merely reflects an important change which has taken place in the attitude of experts towards the whole question of infantile vaccination. As was mentioned in the Report for 1906, a joint statement was made by the Honorary Secretaries of the Jenner Society and the Imperial Vaccination League (*Times*, April 25th, 1906), that there was "a growing opinion that in consequence of altered social conditions, and improved sanitary administration, it is not absolutely necessary to have infants of a few months old vaccinated, except in the presence of epidemic smallpox," and they therefore advocated the postponement of vaccination until school age. Such an expression of opinion from the leaders of the two societies specially formed to promote vaccination marked a very important change of front, and must make it rather difficult for anyone now to take up the extreme position, formerly so often held, that compulsory infantile vaccination was a vital necessity, to be enforced at any cost.

Personally, although believing in the efficacy of recent vaccination as strongly as ever, I was forced to the conclusion some years ago, as the result of my experience of the behaviour of smallpox in Leicester, that the neglect of infantile vaccination played a much smaller part in the spread of the disease than was commonly believed. Nor is it very difficult to explain this. It is well-known that the protection conferred by vaccination against attack by smallpox is only of a temporary character. Hence, even in a "well-vaccinated" community, in which, say, 99 per cent. of the infants are vaccinated, the proportion of the total population which is efficiently protected is only small, being confined practically to the children under ten or twelve years of age. But experience of smallpox in Leicester seems to show that it is essentially the *adult* population which is the principal factor in the spread of this disease; and for practical purposes this section of the community is but little more protected (so far as liability to attack is concerned) in a well-vaccinated town than in a badly vaccinated one.

Moreover, there is a very important consideration which I have frequently referred to, viz., the greater tendency amongst persons vaccinated many years before to contract a very slight attack of smallpox, in which the symptoms are so trivial and atypical that the real nature of the disease is readily overlooked. In almost every outbreak of smallpox such cases occur, and evidence is accumulating as to their great potency for mischief in spreading the disease.

Vaccinated persons, whose vaccination has "lapsed"—(and such persons constitute a majority in a vaccinated community when vaccination in infancy only is practised)—may, therefore, conceivably be as great a hindrance to the prompt stamping out of smallpox as persons who have never been vaccinated at all, and in whom, when the disease does occur, the symptoms are well marked and easily recognisable.

SCARLET FEVER.

(Cases, 1,206; Deaths, 29.)

Although scarlet fever was still unduly prevalent during the year it showed a marked decrease as compared with the two previous years.

		Cases.		Deaths.
1905	..	1,117	..	36
1906	..	2,301	..	52
1907	..	1,710	..	44
1908	..	1,206	..	29

It is interesting to note that a decade ago the town experienced a similar visitation, the years of excessive prevalence being 1896-1899. The total number of cases notified during those four years was 5,925, as against 6,334 during the four years 1905-1908. In proportion to population, however, the attack rate has been slightly lower during the latter four years.

Scarlet Fever is a disease which usually shows a seasonal variation, being more prevalent in Autumn and Winter than during Spring and Summer.

The average number of cases occurring each month of the year during the past four years is shown graphically in the annexed diagram.

The number of cases removed to hospital was 866, or 71·8 per cent. of the cases reported.

The Isolation Hospital is so popular with the general public, in Leicester, that so far from there being any difficulty in inducing parents to allow their children to come to hospital, it is difficult rather to keep them out, even in cases where with a little trouble and inconvenience the patient might be nursed at home

SECONDARY CASES.

The number of cases occurring in households in which a previous case had been notified (within six months), was 261, or 21·6 per cent. In 1907, the proportion was 22·6 per cent., and in 1906, 24·3 per cent. There were 199 instances of two cases coming from one house, 44 instances of three cases, 13 instances of four cases, four instances of five cases, and one instance of six cases from one house.

There were 746 cases in houses in which no further cases occurred.

The removal of cases to hospital appears to make very little difference in the proportion of secondary cases.

RETURN CASES.

The number of instances in which the return home of a patient from hospital was followed by a fresh outbreak of the disease was 57, or 4·7 per cent. of the cases discharged. Excluding cases in which there is a reasonable doubt whether the return of the first patient was in any way causally connected, the percentage becomes 4·1 per cent.

DIPHTHERIA.

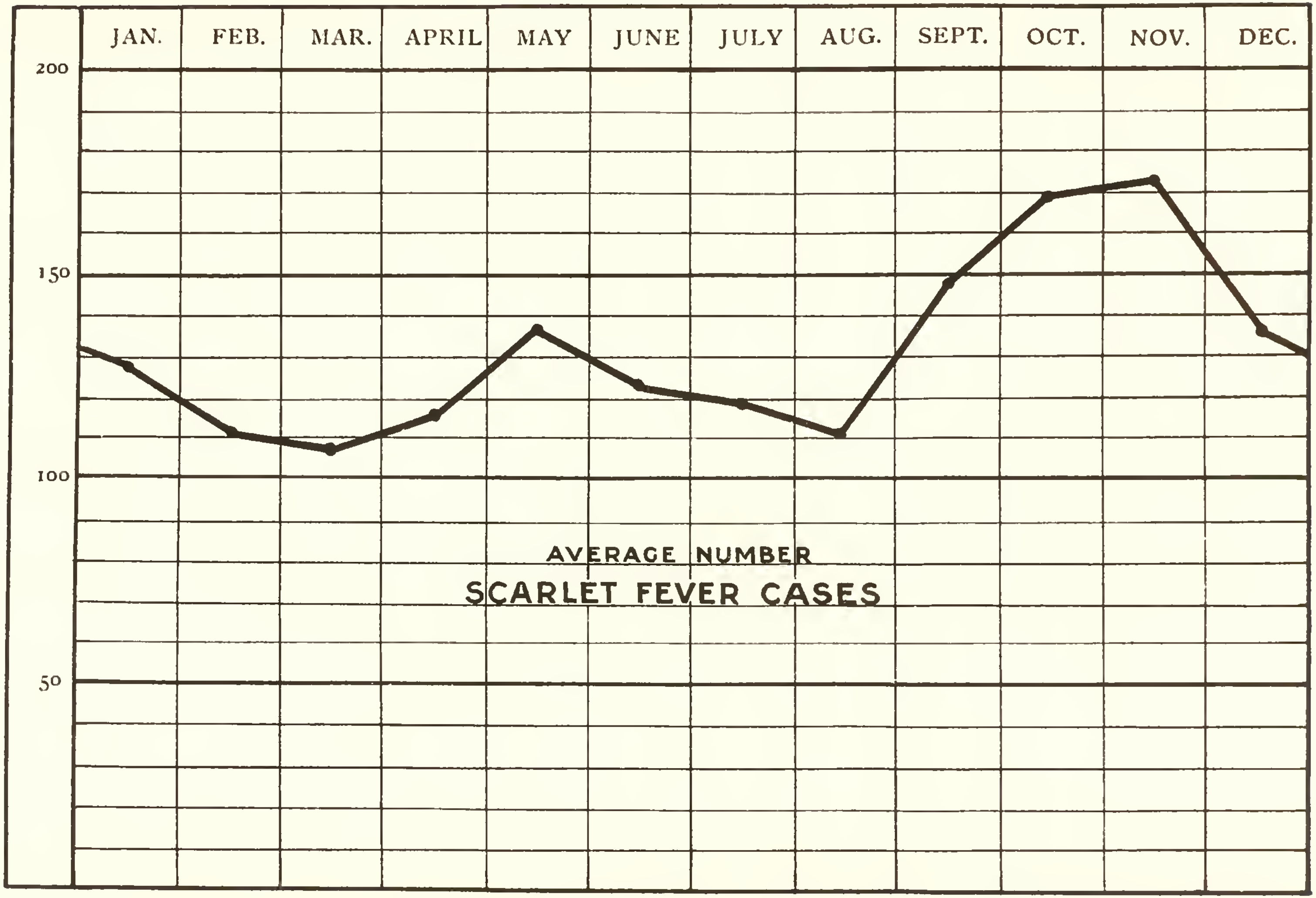
(Cases, 123; Deaths, 9.)

With the exception of the year 1904, there were less cases and less deaths from diphtheria during 1908 than in any year for the past twelve years. This is especially satisfactory, as in the three preceding years the disease had shown a slight tendency to increase.

Ninety-two of the cases were removed to hospital. In non-epidemic times diphtheria shows but little tendency to spread to other members of the family, and during the year, only in nine instances, or 7·3 per cent., did more than a single case occur in the same household.

DIAGRAM SHOWING AVERAGE FLUCTUATION IN SCARLET FEVER

prevalence during the Four Years—1905-1908.



ENTERIC FEVER.

(Cases, 43; Deaths, 8.)

Enteric or typhoid fever is, on account of its high fatality and the prolonged and exhausting character of the illness, one of the most serious zymotic diseases met with in this country. From the point of view of the individual, indeed, it is probably *the* most serious zymotic disease. As, moreover, the disease is usually regarded as an index of the sanitary condition of a locality, it is very satisfactory to be able to note that for fifteen years—ever since 1893—the disease has shown a steady tendency to decrease. This is exemplified by the following figures:—

ENTERIC FEVER.

Triennial Period.		Average No. of Cases Annually.		Average No. of Deaths Annually.
1895—1897	..	249	..	39
1898—1900	..	172	..	27
1901—1903	..	88	..	15
1904—1906	..	66	..	12
1907	...	47	...	5
1908	...	43	...	8

A marked decline in the prevalence of this disease has occurred throughout the country during the past thirty years, but very few large towns have a lower rate than Leicester.

Last year the number of cases in Leicester was slightly less than in the previous year, but the number of deaths was slightly greater. In proportion to the population the rate is very small, being only ·033 per 1,000.

The number of cases removed to hospital was 29, of which four proved fatal.

I have in previous Reports referred to the probability that the abolition of pail closets in Leicester, though not the only cause, may have materially contributed to the reduced prevalence of the disease, and in this connection the subjoined extract from the Annual Report of the Medical Officer of Health of Nottingham for the year 1907, is of interest:—

"Enteric Fever.—The history of this disease in Nottingham year by year shows but little variation, except in details of distribution and concentration. The reason of this is, that the dominant cause of its endemicity remains essentially unaltered, though slightly less potent for harm now than formerly. The cause I allude to is the pail-closet system, so often discussed in my Annual Reports. There are at the present time some 36,697 pail-closets in the City. Their condition during the past few years has been greatly improved, from a sanitary point of view, by the substitution of steel for wooden pails, and by the adoption of better methods of scavenging; but their unalterable intrinsic defect is, that they necessarily entail the accumulation of fæcal matter in the vicinity of dwellings, and its dissemination by spillage and soakage, by flies and dust and personal convection, over the whole environment of human life—in all poor and congested neighbourhoods where they exist in large numbers. Injurious to health at all times, the harmful influence of such conditions is greatly accentuated by hot and dry weather, especially in districts like Nottingham with a light and porous surface soil. The two diseases which are most actively propagated by such conditions are enteric fever and epidemic diarrhœa, but other complaints of an infectious character are also liable to be spread by them."

In the light of such evidence as this, Leicester may well be congratulated on having made a clean sweep of this insanitary method of removal of excreta. The wonder is that any large and important community should still be willing to tolerate it.

ENTERIC FEVER AND MUSSELS.

The possibility of the infection of typhoid fever being conveyed by shellfish obtained from sewage-polluted layings has long been recognised, but attention has chiefly centred round oysters as being the most important shellfish in this connection. The danger of eating oysters from polluted beds is now so well realised that stringent precautions are taken to guard against it.

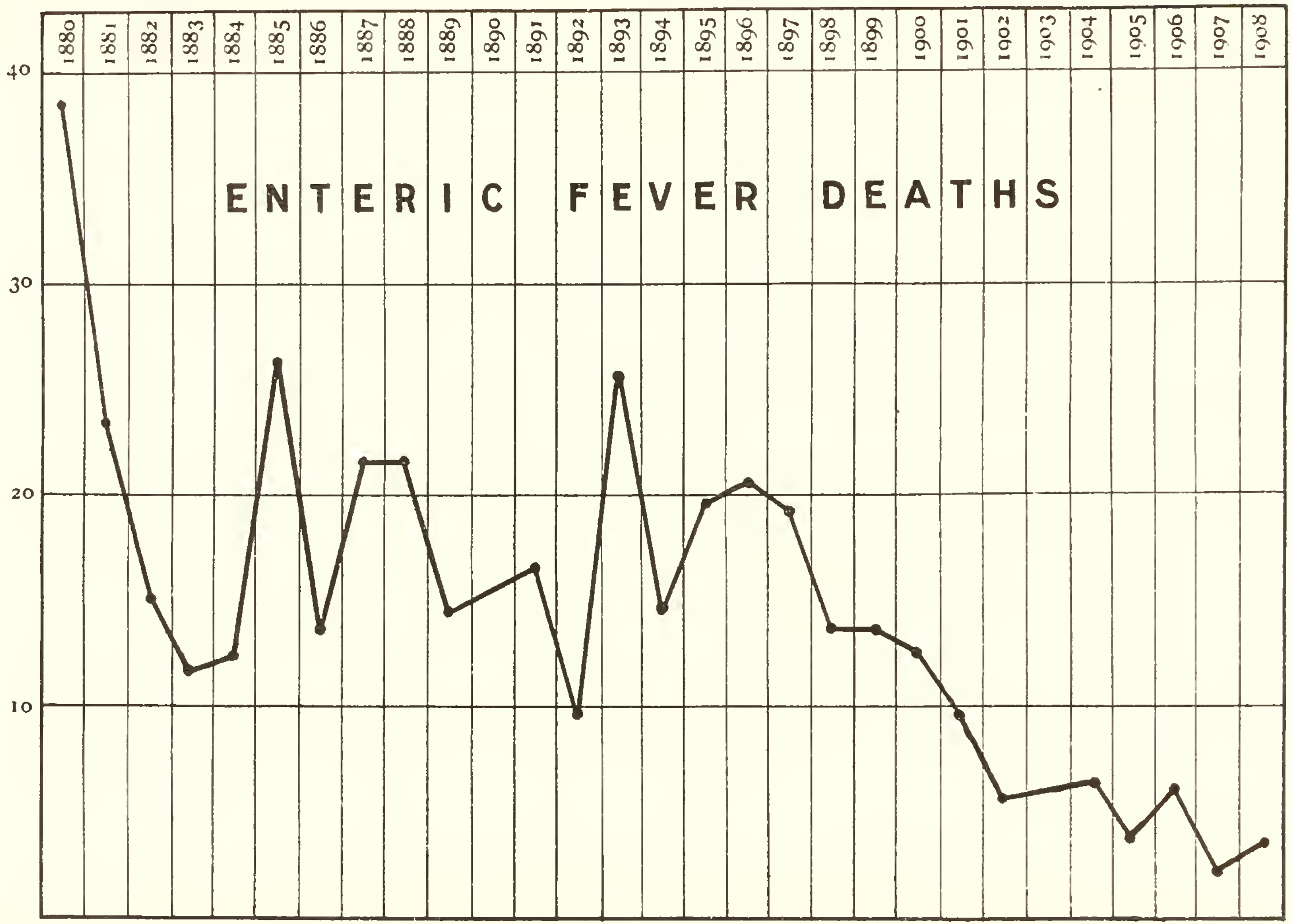
Not long ago a local authority on the East Coast was mulcted in heavy damages on account of its sewage contaminating oyster beds some miles away; and quite recently an oyster merchant was heavily fined for sending to the London Market oysters from contaminated layings.

Comparatively little attention, however, has as yet been directed towards safeguarding the sources of supply of mussels, although an immense quantity of this species of shellfish is consumed annually.

The explanation probably is that it has been assumed that the process of cooking, to which mussels are usually subjected before being eaten, would be a sufficient safeguard.

DIAGRAM SHOWING DEATHS FROM ENTERIC FEVER

in Leicester, per 100,000 Population, for the Years 1880—1908.



Unfortunately, mussels are not always cooked, some persons preferring them raw, whilst it has now been proved that the process of boiling mussels for a few minutes is not sufficient to completely sterilise them.

Theoretically, therefore, it is quite possible for mussels, even though cooked, to convey the germs of typhoid fever to persons eating them, although the risk is no doubt less than when they are eaten raw.

A report has recently been presented to the Corporation of Birmingham, by the Medical Officer of Health, in which grounds were adduced for believing that the eating of mussels was playing an important part in the spread of typhoid fever in that City. In consequence of this report, the Birmingham Health Committee issued a warning to the public calling attention to the danger of eating mussels raw, and urging that they should always first be boiled.

As the result of this warning it is stated that the consumption of mussels, whether cooked or raw, fell off very considerably, and that a marked decrease has occurred in the number of fresh cases of typhoid fever.*

As regards Leicester, inquiries have been made, for some years, in all cases of typhoid fever, as to whether any mussels have been eaten, but it was not until the latter end of the year under review that there was any serious ground for suspecting mussels as a source of infection.

The following figures show, for the past five years, the number of cases of typhoid fever in which there was a history of the patient having eaten mussels within three weeks of the onset of his illness. In order to make a fair comparison, only primary cases in a house have been counted, and the period taken has been the four months from November to February when the mussel season is at its height.

	Primary Cases of Typhoid Fever.	Cases with history of eating Mussels.	Percentage.
1904-5	18	3	16·6
1905-6	28	4	14·3
1906-7	21	6	28·6
1907-8	13	1	7·7
1908-9	26	13	50·0

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* It has been decided to issue a similar warning in Leicester when the next mussel season approaches.

The following are the particulars of the thirteen cases during the present mussel season :—

Reg. No.	Name.	Age.	History.
30	Elsie R——	17	Frequently eats mussels
31	Horace T——	27	Frequently eats mussels; had some shortly before he was taken ill
34	Alfred N——	43	Ate mussels about a week before he was taken ill
35	Fred. C——	47	Ate mussels about a week before he was taken ill. Wife had diarrhœa at the time they had them
37	Eliz. O——	14	Had some mussels for tea, purchased in street, 19 days and again 12 days before being taken ill
38	Bertie G——	9	Frequently has mussels
41	Fred. B——	37	Eats mussels and oysters frequently. Eats mussels raw
42	Frances E——	13	Frequently has mussels
Jan., 1909 3	George G——	12	Frequently eats mussels and sometimes raw
7	Jessie H——	24	Is fond of mussels
16	Fred J——	26	Eats mussels (cooked) every Saturday and Sunday
17	Charles W——	29	Ate mussels six days before he was taken ill. Buys them ready cooked
Mar. 1st. 18	Mary G——	40	Eats mussels raw and cooked every Saturday

As a control test inquiries were made (during March, 1909), at thirty-three houses where no typhoid fever had occurred, and it was found that in these there was a history of eating mussels in only five cases, or 15·1 per cent.

I have obtained the following particulars as to the mussel trade in Leicester.

The season lasts from October to March. During these months an average of about 200 bags of mussels are delivered in Leicester each week. The average weight of a bag is about 1¼ cwt. so that something like 12½ tons of mussels per week are sold. The mussels are retailed at 2d. per quart (of 2 lbs.), and also from plates of six or eight for a penny. In addition to being sold in the market and from shops, mussels are frequently hawked about the town.

The supply of mussels for Leicester is from Kings Lynn and Brancaster, in Norfolk; from Boston and Sutton Bridge in Lincolnshire; and also from Ireland. Occasionally consignments are received from Holland *via* Hull.

MEASLES.

A serious epidemic of this disease began in the last quarter of the year, and rapidly spread to almost all parts of the town. The severity of the outbreak is indicated by the fact that no less than 124 deaths occurred during the eight weeks ending December 26th. The total number of deaths during the year was 167, practically all of these occurring during the last quarter,* the Borough having been almost entirely free from the disease since early in 1907.

The great majority of the victims, as is usually the case, were young children, 160 out of the 167 deaths being under five years of age, and 34 of these under one year.

Particulars as to the deaths from measles in Leicester during the past twenty-nine years are given in Table XXIV. From this table it is seen that the death-rate from measles in 1908 was the highest for ten years. This high rate is the more disappointing as the deaths from measles had shown previously a fairly steady tendency to decrease.

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* The epidemic continued through the early months of 1909, 118 deaths being caused during January, February, and March.

Quinquennial Period.	Measles, Deaths per 100,000 population (Average Annual Number).
1880-84	51
1885-89	45
1890-94	44
1895-99	41
1900-04	23
1905-07 (3 years)	28

As we have no definite knowledge of the number of cases of measles, it is impossible to determine the case-mortality or proportion of deaths to cases. It is probable, however, that the large number of deaths was partly to be accounted for by an unusually severe type of disease.

Pulmonary complications were responsible for the fatal result in many of the cases (as is usual with this disease), and in some, at least, of these cases it is probable that more care, or better treatment, might have prevented these complications.

There is undoubtedly a tendency amongst the poor to treat measles much too lightly, as if it were a trifling complaint. "Only measles," is a common expression. Scarlet fever, though not a more fatal disease, is regarded with much more respect.

With a large family in a small house and with limited means, it is often very difficult to give the same care and attention that is possible and easy under more favourable circumstances. In many cases of measles the child is treated on the couch downstairs, more or less exposed to draughts, partly for convenience and partly to save the extra fire.

In the hope of educating the Public as to the real nature of the disease, a poster was issued by the Sanitary Committee, briefly setting forth the early symptoms of the disease and the precautions which should be taken.

MEASLES AND SCHOOL ATTENDANCE.

There is no doubt that measles is highly infectious from the onset of the first symptoms, and before the characteristic rash has appeared. During this, the *prodromal period*, the symptoms are often difficult to distinguish from those of an ordinary cold. The children are not usually isolated, and the disease very readily spreads to schoolfellows and playmates.

The question of school attendance as regards children living in houses where the disease has appeared is not infrequently raised. If all such children were excluded from school, as is advocated by some, the interference with education is very serious. More than one case in a house may occur and the period of exclusion may have to be spread over many weeks. The chief danger to be apprehended is that a child from an infected house may develop the disease at school and thus convey the infection to others. The risk of carrying infection in the clothing is probably only very slight. It is comparatively rare for a child who has already had the disease to be attacked a second time, although undoubtedly this does sometimes happen. Now it is found that the great majority of the children in the upper standards have already had measles at some time in their lives, so that the danger of the disease spreading amongst them is very small.

THE PRACTICE IN LEICESTER.

In Leicester the following practice, based on the recommendation of the International Conference of School Hygiene, has been adopted :—

1. Children recovering from measles are not allowed to return to school for *four weeks* from the time they were first taken ill.

2. Other children in the same house, not themselves suffering from the disease, are divided into two categories :

(*a*) Those in the Infants' Department, or in Standards I and II.

(*b*) Those in Standard III and upwards.

Class (*a*) are kept from school for two weeks after the onset of the last case.

Class (*b*), if they have already had the disease (and the great majority of children have), are allowed to continue attendance at school.

The reason for this distinction is that it has been found by experience that cases of measles, so far as public elementary schools are concerned, are practically confined to the Infants' Department, and that in Standard III and upwards the disease rarely, if ever, spreads.

The following figures (supplied by Dr. Warner, the Medical Officer to the Education Committee), illustrate this :—

In sixteen of the schools principally affected with measles during the last quarter of 1908, the total number of scholars attacked was 1,388. Of these, only 26 (or 1·9 per cent), were children in Standards III to VII; 31 (or 2·2 per cent.) were in Standards I and II; whilst no less than 1,331 (or 95·9 per cent.) were children in the Infants' Departments.

Expressed as a percentage of the children on the books, less than one per cent. of the children in the Standards were attacked, and (so far as the schools included in this return are concerned), none of the few cases that did occur proved fatal.

These figures clearly demonstrate that the practice now followed in Leicester is fully justified by results, and that so far as children in the Standards are concerned there is but little danger of measles spreading.

It may be added that other towns, *e.g.*, London, Brighton, and Croydon, have adopted a similar practice to that in Leicester as regards exclusion from schools in connection with this disease.

School Closure was not resorted to during the year, though the Education Authority voluntarily closed three schools a few days before the holidays owing to the low percentage of attendance. The closure of schools as a means of preventing epidemics of measles has not met with sufficient success to justify resort to it except in special cases.

MEASLES AND POVERTY.

It is difficult to say how far the excessive number of deaths occurring in this epidemic were directly due to poverty. Certainly the majority of the fatal cases occurred in the poorer quarters of the town, and poverty, sometimes extreme, was found to exist in a number of the cases investigated. A fatal termination in this disease is often the result of want of sufficient care and attention, and this, of course, it would be more difficult to give if the family was suffering from poverty. Also children whose constitution was weakened by insufficient food would naturally be the most likely to succumb.

In Part I of this Report, under the head of Ward Death-rates, reference has already been made to the significant fact that the mortality from measles was five times as great in the four Wards—Newton, St. Margaret's, Wyggeston, and Latimer, as in the rest of the Borough, viz., 2·00 per 1,000 population, as against only ·35. In view of the fact that the epidemic was wide-spread, and had invaded many other Wards by the end of the year, we may conclude, I think, that the fatality, or proportion of cases proving fatal, was much higher in these Wards; and as they include some of the poorest parts of the town, it is very suggestive of the important part played by social position and prosperity upon the fatality of this disease.

In more than half the cases investigated it was found that a medical man was in attendance.

In the great majority of the fatal cases death was due to broncho-pneumonia.

About half the cases were being nursed downstairs in the living-room, not infrequently the perambulator being used as a cot.

The following is a copy of handbill which was issued by your Medical Officer during the prevalence of the epidemic:—

Borough of Leicester.

MEASLES.

Measles is a *very serious disease.*

It causes more deaths than Smallpox, Scarlet Fever, and Typhoid Fever put together.

Most of the deaths are in young children under the age of 3 or 4 years.

There is a special reason, therefore, for striving to protect children from it during the early years of life.

Symptoms.

These at first suggest an ordinary feverish cold—sneezing, coughing, running at eyes and nose, &c; occasionally vomiting, diarrhœa, or shivering. The *rash* usually does not appear till third or fourth day, is red and spotty in character, and is present on face and neck as well as on body and limbs.

The disease *is very infectious* from the very beginning, so if measles is suspected the case should be *isolated at once* in a room by itself. When this is not possible, at least keep it away from the younger children who have not had the disease.

Nursing.

Keep child warm *in bed;* avoid exposure to draught; keep room at even temperature. Burn all discharges from mouth, nose or eyes. Feed on milk and slops. The chief danger lies in catching a chill. The child should be carefully sponged over with warm water every day.

INFECTION.

In slight cases children may appear well at end of 10 days, but they must be treated as still infectious and not be allowed out until end of third week. At termination of case, *wash everything* that can be washed and thoroughly air everything else.

SCHOOL ATTENDANCE.

Children *in Standard III and upwards*, if they have already had the disease, need not be kept from school. All others must be kept away until two weeks after the beginning of the last case.

Children recovering from Measles must not be sent to school for at least four weeks (counting from the first day of being taken ill).

WHOOPING COUGH.

The number of deaths caused by this disease was 30. With the exception of the year 1907 this is the smallest number for many years, the average for the previous ten years being 59. All but one of the deaths were in children under five years of age, whilst 18 of them were in infants under one year.

ERYSIPELAS.

There were 162 cases of erysipelas notified, or about the same number as in the two previous years, but considerably less than the average.

The number of deaths was five.

It has frequently been remarked that there is little to be gained from the inclusion of this disease amongst the list of notifiable diseases. It is very rare, indeed, that the disease spreads in a household, but it is not very uncommon for the same individual to be attacked more than once, and we have records of one case which has been notified as suffering from erysipelas four times in three years !

PUERPERAL FEVER.

Ten cases of puerperal fever were notified during the year (including under this heading all notified cases of septic infection occurring in connection with child-birth), and several of these were of a very slight character, the temperature only being raised for a day or two. Only two of the cases proved fatal.

During the past three years, 1906-8, there have been 17,026 confinements in Leicester, but only eight fatal cases of puerperal fever. This amounts to one in every 2,000 births—a highly satisfactory record.

DIARRHŒA.

For several years there have been indications that, in spite of fluctuations due to meteorological conditions, the annual epidemics of infantile diarrhœa in Leicester are becoming less fatal.

In 1906, with a hot and dry summer, the number of deaths from diarrhœa was slightly below the average. In 1907, with a cool wet summer, the number of deaths was the smallest on record. Last year, 1908, with a moderately hot summer, the deaths, though rather more than in the previous year, were still much below the average.

	Deaths from Diarrhœa.
Average for 14 years, 1893-1906 ..	265
Year 1907	73
Year 1908	120

If only this scourge could be permanently reduced, as there is reason to hope it may be, it would materially improve our death-rate.

PHTHISIS.

(Pulmonary Consumption.)

The number of deaths registered as due to this disease was 287. This is slightly more than in 1907, but is less than the average for the preceding four years.

This disease is the cause of so much economic loss to the Nation, and of so much domestic sorrow and loss to the family, attacking its victims as it does during the active working years of life, that no other disease approaches it in importance. As, moreover, phthisis must be regarded as largely a preventable disease, it is only fitting that it should be considered at some length.

Although about half of the 33 Great Towns have a higher phthisis-rate than Leicester, yet Leicester's position in regard to this disease is not nearly so favourable as her position in regard to the general death-rate, and it is necessary therefore that every effort should be made to reduce its ravages.

VOLUNTARY NOTIFICATION OF PHTHISIS.

The scheme of voluntary notification of phthisis was begun at the end of 1902, and the number of cases notified each year since then is given below. The number of deaths caused by the disease is also given, as affording an indication of the number of fresh cases occurring, for it may be assumed that, taking one year with another, the latter are not much in excess of the number of deaths.

Year.		Cases Notified.		Deaths from Phthisis.
1903	..	156	..	266
1904	..	182	..	353
1905	..	225	..	288
1906	..	215	..	339
1907	..	212	..	275
1908	..	197	..	287
	Total	1,187		1,808

In Table XXI, the age distribution of the deaths from phthisis for males and females respectively is given.

HOSPITAL TREATMENT FOR PHTHISIS PATIENTS.

The practice of admitting a limited number of phthisis patients to the Groby Road Isolation Hospital was begun in 1903, and ever since (with two slight interruptions of a few months) from 16 to 18 beds have been set apart, in the block originally designed for an "isolation" block but found to suit admirably for consumptive patients. The number of beds now available is 16, nine for males and seven for females. Glass shelters, which serve also as "sun-traps," have been erected in the grounds, and the open-air treatment is thoroughly carried out. The patients sleep out of doors, on glass covered verandahs, winter and summer alike. The patients wait upon themselves, and do most of the necessary ward work, the staff only consisting of one charge nurse—who is necessary to maintain discipline, and to attend to any patient who may be temporarily confined to bed—and one maid. In summer those patients who are fit for it are given, as far as possible, light occupation in the grounds. The patients are allowed at stated times each day to go for a walk outside the hospital grounds, and this privilege has rarely been abused.

In the great majority of cases marked improvement is quickly noticeable. The appetite and weight increase; cough, expectoration, night sweats, &c., diminish or disappear; the physical signs get less, and the general health and appearance improve. So much is this the case that strangers are often astonished to hear that the patients are really suffering from consumption.

The recreations provided consist of air-gun practice, throwing darts, bagatelle, draughts, &c., and gramophone concerts. The latter take place once a week, and are much appreciated. Recently a small billiard table (kindly lent by Dr. Cox) has been added.

Forced feeding is not resorted to, it being found that as a rule the patients' appetites are sufficiently stimulated by the open-air life and the appetising but plain and nutritious food.

The conditions under which patients are admitted are these:—

(*a*) The patient must be a resident of Leicester. Cases from outside the Borough are not admitted.

(*b*) The patient must be examined by the M.O.H. (or Assistant M.O.H.). As a rule this is done at the Isolation Hospital on Wednesday afternoons. Only patients in whom there is some prospect of permanent benefit are passed as suitable. Advanced and chronic cases are not usually admitted.

(*c*) Patients are admitted in the first instance for one month only.

(*d*) At the end of one month, if the case appears to be making satisfactory progress, a second month's stay is granted subject to a payment of 10s. per week. If the patient when at work was a subscriber to the Saturday Hospital Society—as so many of the workpeople in Leicester now are—this charge is defrayed by that Society. Last year the total amount paid by patients was £121, of which £79 was from the Saturday Hospital Society.

(*e*) At the end of the second month, if the case is still making satisfactory progress, a third month's stay is granted free of charge. Occasionally, in special cases, a fourth month is granted on payment of 10s. per week.

During 1908 the number of patients admitted was 91, the average time of stay being 60·8 days.

AFTER-HISTORY OF PATIENTS WHO HAVE HAD INSTITUTIONAL TREATMENT.

An effort is made each year to keep in touch with old patients by issuing a circular letter of inquiry. Whilst the great majority of consumptives improve very noticeably during their stay at the Groby Road Hospital, many of them, unfortunately, relapse sooner or later after returning home. Still, it is quite certain that in a few cases the disease appears to be permanently arrested, whilst in many more the patients are enabled to return to work for a longer or shorter time, and to enjoy a fair measure of health.

A great many cases are lost sight of; either they change their address or they fail to fill up and return the form sent to them. The names of those patients who subsequently die are obtained from the death returns, and they are then taken off our list of old patients.

The following brief particulars of selected cases are of interest, none of them having been given in previous Reports.

Beatrice R——, age 16, hosiery hand. Father died of phthisis. Received three months' treatment at Groby Road, leaving in May, 1908. Has since done eight months' work in a factory, and her present health is returned as "fairly good." She writes: "I do not hesitate to say that my stay at Gilroes benefited me greatly."

Arthur W. M——, age 23, printer. Has a brother who also suffers from phthisis. Received three months' treatment at Groby Road, leaving in May, 1908. Has been at work for ten months, and health is keeping good.

Alice H——, age 20, hosiery hand; incipient case. Was at Groby Road for three months, leaving in May, 1908. Since then she has been at work in a factory for nine months, on full time, but states that her health is only "very moderate." She writes (March, 1909): "I greatly benefited by the treatment

I received at the Sanatorium; and the kindness shown was all I could desire; but my work is a disadvantage to my health."

ARTHUR B——, age 22, groom; early case. Was at Groby Road for four months, leaving in May, 1908, the disease being apparently completely arrested. He writes that he is keeping "fairly well." "I still live out of doors as much as I can. I sleep with my bedroom window wide open, all weathers. I try to live up to the treatment as much as ever I can." He is now out of work owing to the death of his employer.

EDWARD D——, age 22, french polisher. Was at Groby Road for two months, leaving in March, 1908. Since then he has been at work for twelve months, and his health is returned as "excellent." He writes (March, 1909): "I have felt nothing of my old complaint for nearly twelve months. My health improved wonderfully during my stay at Gilroes, and it was there I first learnt the value of the fresh air treatment, which I still keep up." (This case had previously been a patient, in 1906, but had a fresh breakdown at end of 1907.)

WM. H——, age 17, fitter. Was at Groby Road for four months, leaving in April, 1908, all signs of the disease having entirely disappeared. Has since done eight months' work as a stable hand, and is keeping quite well.

MARY ANNE H——, age 27, stock-room hand. Was at Groby Road for three months, leaving in February, 1908. Has since been back at work for twelve months, and states that her health is good.

ERNEST M——, age 23, tram-conductor; early case. A brother is also suffering from phthisis. Left Groby Road after two months' stay, during which he gained a stone in weight, in February, 1908, and went for another two months to Ventnor. Has since been back at work for eleven months, and states that his present health is "very good." (This case had previously been a patient, but had a fresh breakdown at end of 1907.)

CASES TREATED IN 1907.

WINIFRED S——, age 18, domestic servant. Was at Groby Road for three months, leaving in December, 1907 Has since been back at work for nine months, and states that her health is keeping very good.

Mrs. H——. Was at Groby Road for three months, leaving in March, 1907. Has since done her ordinary housework, and is keeping well.

Walter J. K——, age 21, mechanic; early case. A brother died from phthisis. Was at Groby Road for one month, early in 1907. Has since been back at work for over a year. He writes (March, 1909): "I think that the month at Gilroes did me a tremendous amount of good, and since then I have done twelve months in S. Africa, which I think practically cured me."

Charles H. B.—— age 16, shop assistant. Was at Groby Road for three months, leaving in May, 1907. He increased nearly a stone in weight whilst under treatment. He has been at work for eighteen months since, and his health is keeping fairly good.

Harry A——, age 19, clerk; early case. Hæmoptysis; right apex affected. Was at Groby Road for three months, leaving in May, 1907. Has since been at work for fourteen months, and his health is keeping good. He writes (March, 1909): "I consider my cure to be permanent. I am quite free from any trace of phthisis, and the doctor pronounces my lungs to be quite sound."

Joseph B——, age 27; ailing for twelve months. Was at Groby Road for three months, leaving in August, 1907. Is now in business and in fair health. He writes: "I felt better when I left Gilroes than I felt for years. . . . . I think the care and treatment I received were extremely good."

Wm. Thos. M——, age 21; early case. Had four months' treatment at Groby Road, leaving in June, 1907, all signs of the disease having then disappeared. He put on 22 lbs. in weight. Has continued quite well since. Was employed for some months on a Window Cleaning Brigade and now has regular work as an engine cleaner.

John Hy. C——, age 19, hawker; early case. Lost a brother from consumption. Was at Groby Road for three months, in middle of 1907. After leaving went to a Home, at Ramsgate, for six weeks. Has since then done twelve months' work, and reports that his health is good.

CASES TREATED IN 1906.

J. W. B——, age 30, railway porter; early case. Had four months' treatment, leaving December, 1906. Gained a stone in weight. Writes (March, 1909) that his health is now as good as it has ever been in his life, and that he has been at work ever since he left. "I feel I owe all to Almighty God, and to the kindness and attention and the splendid treatment I received at the Hospital."

FRED J. S——, age 20; early case. Father, grandmother, and two sisters died of phthisis. Was at Groby Road for three and a half months, latter part of 1906, and gained 22 lbs. in weight. Subsequently went for five months to Western Hospital, Torquay. Has since done nearly two years' work as an insurance agent, and has had no relapse.

IRENE M——, age 19. Was at Groby Road for two months, in latter part of 1906. Has since been at work in a hosiery factory for a year and a half, and her health is keeping good.

WM. W——, age 40, clicker. Was at Groby Road for two months, in 1906, gaining 16 lbs. Has been at work ever since, and health continues good.

CASES TREATED IN 1905-4-3.

BERTHA S——, age 20. Right apex affected. Admitted to Groby Road for two months, in 1905. She was at work for two and a half years, and then got married. She now writes that she is better and stronger than she has ever been.

ALBERT R——, age 26, box packer. Was at Groby Road for one month in 1904. Has been at work almost ever since, and writes that he is now quite well.

ALICE S——, age 32. Was at Groby Road for one month in 1904. Has since been working in an elastic web factory, and has not lost more than three months from work on account of her health in five years.

PRISCILLA C——, age 19. Admitted to Groby Road Sanatorium for one month in 1904. Has since got married, and is keeping quite well.

SAMUEL T——, age 41, plumber. Admitted to Groby Road for one month, in 1904. Has since been at work for over three years, and states that his present health is good.

John T. A——, age 26. Father died from phthisis. Was at Groby Road for one month in 1903. Has since been in regular out-door work, and his present health is good.

OTHER MEASURES ADOPTED FOR CHECKING TUBERCULOSIS.

All cases notified are at once visited by one of the Women Inspectors who obtains certain particulars and ascertains the conditions under which the patient is living. Advice is given verbally and printed instructions are also left. When the patient is sleeping in the same bed with someone else efforts are made to get the arrangement altered.

Advice is specially given as to the importance of fresh air, and as to the disposal of the expectoration. In most cases a pocket spittoon is given gratuitously, and in some cases, a spit cup.

At the termination of a case, or if the patient moves to another house, disinfection is performed. An addressed post-card is left at the time of the inspectress's visit in order that any change of address may at once be notified.

With the object of spreading information as to the nature of consumption, and the means for its prevention, several addresses to Adult Schools, Men's Meetings, &c., have been given, and much interest in the subject has been evinced.

FAMILY HISTORY OF PERSONS SUFFERING FROM PHTHISIS.

The following particulars as to family relationships have been obtained by the Women Sanitary Inspectors in the course of their visits to consumptives. They show the number of instances in which other members of the same family have, so far as is known, been sufferers from this disease :—

Relationship.	No. of Instances.
(1) Father or mother [in 16 of these a brother or sister also affected, but these are not included in (2)]	48
(2) Brother or sister (in 8 cases more than one)	29
(3) Uncle or aunt (no nearer relative) ..	22
(4) Husband or wife	6
(5) Son or daughter	1
(6) Grandparents (no nearer relative)	7
(7) No history of consumption in family ..	77
Total cases investigated	190

As the question of family history is one of interest and importance the corresponding figures for preceding years have been summarised and are shown in tabular form in Table XXVII.

THE MILK CLAUSES IN THE LEICESTER CORPORATION ACT, 1908.

These are what is known as the "Model Milk Clauses," such as have been obtained by a number of other towns. They confer powers for dealing with tuberculous milk sold within the Borough, whether produced within or without the Borough Boundaries. In the latter case the procedure is more complicated. The Clauses came into force at the beginning of the year 1909.

The opinion expressed by the Royal Commission on Tuberculosis is that in the drinking of tuberculous milk lies the chief danger of tuberculosis being contracted through food.

One great argument for the use of "dried milk" in the feeding of infants is that in the process of manufacture the temperature to which the milk is raised is sufficient to destroy any tubercle bacilli, whereas the temperature of Pasteurised milk is not sufficient to do this.

At the Corporation Infants' Milk Depot the use of dried milk has largely superseded humanised milk, about two-thirds of the infants now being fed on it.

CALMETTE'S TEST FOR TUBERCULOSIS.

This test was referred to in my last Annual Report as possibly affording valuable assistance in the early diagnosis of tuberculosis. During the year the test has been applied very frequently, both at the Groby Road Sanatorium and at the Town Hall, upon patients sent for this purpose by medical men.

My experience of it has led me to the opinion that whilst it is of undoubted value for purposes of early diagnosis, and is very simple and convenient in use, it is not entirely reliable, and is not altogether free from serious drawbacks, *e.g.*, the possibility of its setting up troublesome conjunctivitis. For this reason it is not to be recommended for routine use, but should be reserved for specially selected cases. It is important that when it is used a very weak solution should be employed in the first instance. If this gives no reaction, a stronger solution may then be resorted to. In this way the risk of too violent a reaction is minimised.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1908.

By an Order made by the Local Government Board, under Section 130 of the Public Health Act, 1875, the notification of all cases of pulmonary tuberculosis occurring amongst the inmates of Poor Law Institutions, or amongst persons under the care of District Medical Officers, has now been made compulsory.

The Order was issued in December, 1908, and came into force with the beginning of 1909.

The notification must be posted to the Medical Officer of Health, within forty-eight hours of the Medical Officer of a Poor Law Institution, or the District Medical Officer becoming aware of the nature of the disease.

It is also made compulsory on the Superintending Officers of Poor Law Institutions to notify to the Medical Officer of Health the address of any patient, so notified, on his leaving the Institution, whilst the Relieving Officers are called upon to notify any change of address.

In all cases the notifications have to be made on prescribed forms.

Provision is made for remuneration by the Local Authority to whom the notifications are sent, after the following scale :—

Medical Officers, one shilling for each notification (sixpence for a second notification of the same case).

Superintending Officers and Relieving Officers, threepence for each notification.

In Leicester, where a system of voluntary notification is in force, under which the great majority of Poor Law cases are already notified, the new Regulations will not be of the same value as in localities where no system of notification has hitherto been in force. As a step towards the compulsory notification of all cases of pulmonary tuberculosis they are, however, to be welcomed.

The new Regulations will add a little to the work of the Department—the number of notifications received being considerable. Thus, during the first quarter of 1909 the number was 211, relating to 151 cases. Many of these cases, however, were already known to the Health Department, having been previously notified under the scheme of voluntary notification.

ADMINISTRATIVE MEASURES AGAINST TUBERCULOSIS: MEMORANDUM BY THE MEDICAL OFFICER TO THE LOCAL GOVERNMENT BOARD.

In connection with the above new Regulations a Memorandum on Administrative Measures against Tuberculosis has been issued by Dr. Newsholme. This is so important that it will be well to summarise it here.

Dr. Newsholme points out that tuberculosis is an infectious disease caused by the tubercle bacillus. Its development is aided by defective nutrition and other conditions unfavourably affecting the general health, but the disease can be prevented by avoiding infection. He believes that infection from human patients is chiefly responsible for the spread of pulmonary tuberculosis.

Tuberculosis can be Arrested.

Tuberculosis is not only a preventable disease but it can be arrested, especially in its earlier stages. Indeed, the majority of those attacked by it—the Memorandum says—recover.

Importance of Instructing Patients.

Whilst an exaggerated fear of the infectiousness of pulmonary tuberculosis is unnecessary, it is desirable to inculcate more exact knowledge as to the disease, as tuberculosis is essentially a disease of ignorance.

Sanatorium Treatment.

Pulmonary tuberculosis being a disease of protracted duration, institutional or domestic isolation of patients during the whole course of the disease is impracticable. A short stay in a sanatorium is probably, however, the most effective way of educating a patient as to a proper mode of life. The habits of life thus initiated are likely to be maintained, if patients are afterwards kept under supervision by visits from a competent and sympathetic health visitor.

Early Diagnosis.

The great importance of early diagnosis is explained, and the provision of facilities for the gratuitous examination of sputum is advocated.

Tuberculosis Dispensaries.

The desirability of the institution of a tuberculosis dispensary, where patients with symptoms suggestive of early tuberculosis may receive prompt and special attention, is suggested.

Informing the Patient of the Nature of his Illness.

It is laid down as essential that when once a diagnosis of pulmonary tuberculosis has been made, the medical practitioner in attendance should acquaint the patient with the nature of his illness. This is indispensable if the active co-operation of the patient in regard to precautions and the taking of steps toward recovery is to be secured.

Disinfection.

Disinfection of rooms should be carried out after being vacated by a patient, and at other times if necessary.

Action against Infection.

Indiscriminate expectoration is to be checked, and bye-laws prohibiting spitting in public carriages, halls, places of entertainment, &c., are desirable when sanitary authorities have the necessary powers. The free distribution of spittoons to consumptive patients is recommended.

The Institutional Treatment of Advanced Cases of Pulmonary Tuberculosis.

In the homes of the poor it often happens that suitable bedroom accommodation cannot be provided for advanced cases, and that the wife or person in charge of the patient is over-worked and so rendered more easily a victim to the infection. " Hence, " the medical attendance and nursing of a larger proportion of the " total advanced cases in hospitals must form an essential part " of an effective scheme for preventing tuberculosis." Whilst a certain amount of provision for this already exists, in general and special hospitals and workhouse infirmaries, " such arrangements " need to be extended, and the hospital treatment of the bed- " ridden consumptive in the ideal State will be made so popular " that domestic infection will become much less frequent than at " present."

Dr. Newsholme is very sanguine that this terrible scourge of tuberculosis is capable, with proper and efficient administrative measures, as outlined above, of being brought under control, and that eventually it will become "as much a disease of the past in this country as leprosy has become."

It is satisfactory to find that all the principal measures advocated above have already been adopted in Leicester, with the exception of the provision of adequate institutional treatment for advanced cases.

This is a most serious question, and I am becoming more and more convinced that it will have to be faced. It is true that some provision is made at the North Evington Infirmary, but it does not go far enough.

What is needed, if the hospital treatment of advanced (and highly infective) cases is to be made really popular, is (*a*) that accommodation for them should be provided in an institution apart altogether from Poor Law administration, *e.g.*, by the Sanitary Authority; or (*b*) that the treatment of consumptive patients by the Poor Law Authorities should be placed on an altogether different footing from that of other diseases, on the ground that it is for the benefit of the community as well as of the individual that these cases should be removed from their homes. It is already the case, I believe, that some special consideration is shown at the North Evington Infirmary to consumptive patients, but it has not been carried far enough as yet to make the institution really popular, and as a rule patients will not go there until they are compelled to do so, and they remain at home, to the danger of their families, as long as they possibly can.

PART III.

GENERAL.

ADMINISTRATION OF FACTORY AND WORKSHOPS ACT, 1901.

1. *Inspection.*—The number of visits paid during the year to factories and workshops was 340, in addition to visits paid to *work-places.*

2. *Defects.*—The following defects were found :—

Want of Cleanliness	49
Want of Ventilation	2
Other Nuisances	40
Insufficient Sanitary Accommodation ..	16
Total . ..	107

Notices were served and the great majority were complied with. There were no prosecutions.

3. *Home-work.*—The number of lists received from employers was as follows :—

	Twice in the Year. Lists.	Twice in the Year. Outworkers.	Once in the Year. Lists.	Once in the Year. Outworkers.
Wearing Apparel (making)	92	2,136	58	991

The number of addresses of out-workers received from other Councils was 31.

The number of addresses of out-workers forwarded to other Councils was 582.

The number of inspections of out-workers' premises was 340. Only in two instances were cases of notifiable infectious disease discovered at the time of the inspection, together with six cases of phthisis. In addition to these, however, home-work was found to be carried on in 77 houses* in which cases of infectious disease had already been notified, viz. :—

Hosiery Work	in 23	houses.
Glove Work ..	8	,,
Tailoring	,, 7	,,
Boot and Shoe Work	,, 39	,,

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* In previous years this distinction has not been made.

4. *Registered Workshops.*—The number of workshops on the Register is 898.

5. *Other Matters.*—

Cases notified by H.M. Inspector as remediable under the Public Health Act . .	13
Reports (of action taken) sent to H.M. Inspector	10
Underground Bakehouses in use at end of year	3

ADMINISTRATION OF THE MIDWIVES ACT, 1902.

Since my last report two midwives have begun to practise in the Borough, two have died, and four have ceased to practise: leaving 36 practising registered midwives in the Borough as against 40 in the previous year. Most of those who have been taken off the list, however, had only small practices, so that the effective supply of midwives in the Borough is not materially affected.

A list of the midwives practising in Leicester is given in Appendix IX.

In addition to the names there given, there are seven unregistered midwives still practising, as they are entitled to do until March 31st, 1910. Several of these, however, are doing very little.

The number of births attended during 1908 by the registered midwives was about 2,300. This figure has been arrived at by personal examination of the midwives' books. To these may be added some 300 births attended by the unregistered midwives, making a total of 2,600 attended by midwives, or 45·8 per cent. of the total births.

I do not anticipate that any shortage of midwives is likely to occur, so far as Leicester is concerned, when the time limit for unregistered midwives expires, as it will do next year. As stated above, there are only seven unregistered women still practising in the Borough, and many of the registered midwives (especially those who have recently started to practise) complain that they have not enough to do.

The number of *still-births* notified by midwives under the Act was 77, and there were 32 intimations of having sent for medical help.

INSPECTION OF MIDWIVES.

The practising registered midwives have, with but few exceptions, been interviewed twice during the year, and their case-books and midwifery bags inspected. Speaking generally, they were found to be satisfactory. A few of the older midwives prefer to have their books posted up for them by a son or daughter possessing more facility than themselves with the pen.

The inspections take place at the Town Hall, in the Medical Officer of Health's office. A circular is sent out a few days beforehand requesting attendance and giving the choice of several days, at certain specified hours, in order to render attendance as little inconvenient as possible.

The system of voluntary notification of births attended by midwives continues to work very satisfactorily, and 2,220 notifications were received. The midwives are supplied with books of stamped addressed forms, so that the trouble involved is only slight. The majority of the returns are received within a few days of the date of birth.

PUERPERAL FEVER.

Only four cases of puerperal fever occurred in the practice of midwives during the year, and fortunately none of these proved fatal. Such a record is very satisfactory, in view of the large number of births attended by midwives; and especially when we consider the very unfavourable surroundings and absence of proper conveniences which too often obtain amongst many of the cases attended by midwives.

MIDWIVES' GARDEN PARTY.

There is no doubt that midwives are capable of rendering valuable assistance to the Sanitary Authority, in the direction of reducing infant mortality. With a view to securing their co-operation in this good work, as well as to promote a good understanding between them and the officers of the Corporation, a Garden Party was given by the Medical Officer of Health during the summer at which 21 midwives were present, together with the two Women Sanitary Inspectors, the Manageress of the Milk Depot, &c. In the course of the afternoon, addresses on the question of Infant Mortality were given by the Chairman of the Sanitary Committee (Ald. Windley) and the Medical Officer of Health.

THE NOTIFICATION OF BIRTHS ACT, 1907.

This Act, which calls for the notification of all births to the Local Authority, within 36 hours of birth, by the *father*, or other person in attendance upon the mother, has not been adopted in Leicester.

The history of the Act so far as Leicester is concerned is a rather chequered one. The proposal to adopt it was discussed by the Sanitary Committee on several occasions, it being finally decided by a small majority not to adopt the Act. On the matter coming before the Town Council, however, the question was referred back to the Committee for further consideration. The Sanitary Committee thereupon again fully discussed the question and this time decided by a small majority to adopt the Act. On again coming before the Council, however, a petition, signed by all the medical practitioners in the Borough, was presented, asking that the Act should not be adopted. Partly in deference to this petition, the Council decided, after another full debate, and by a small majority, not to adopt the Act, on the understanding that the medical men should be invited to notify voluntarily any births where, in their opinion, benefit would result from visitation by a health visitor.

This invitation was accordingly issued in July, 1908. The number of births notified by medical men up till the end of the year in response to this appeal was 43, almost all of them coming from two or three of the District Medical Officers (Poor Law).

It must be remembered, however, that amongst the private patients of medical men the number of cases calling for visitation would not, in any case, be very large, and the notification being voluntary, private patients might possibly resent it, as introducing an invidious distinction.

All births attended by midwives are notified (as stated above) under a voluntary arrangement with the midwives.

NOTIFICATION OF BIRTHS THROUGH THE GUARDIANS.

In order to relieve the District Medical Officers of the trouble of notifying voluntarily, as well as to ensure more complete returns, an application was made by the Sanitary Committee to the Guardians, asking that information as to all births attended by the District Medical Officers should be sent through the Clerk to the Guardians, and offering to pay for the clerical work involved. Unfortunately, the Guardians declined to consent to this request.

DISINFECTION.

The method of disinfection for infected rooms at present carried out in Leicester is (*a*) by formaldehyde gas generated from solid paraform ; (*b*) by spraying with solutions of formaldehyde. The number of houses or parts of houses disinfected during the year was 1,658.

Steam Disinfecting Station.—This is situated at the Mill Lane Destructor, being removed thence from the old fever hospital, at Freake's Ground, after the latter was closed. During the year bedding, clothing, &c., from 138 houses was removed to the Station and disinfected.

ALCOHOL AND PUBLIC HEALTH.

The number of deaths ascribed as *directly* due to alcoholism during 1908 was only four, but as is well known, under our present system of registration, the number of these deaths is no real guide to the part played by alcohol as a cause of death. The principal reason for this is, of course, the natural reluctance of medical men to hurt the feelings of the relatives, together with the fact that alcohol is in the majority of cases only an indirect cause of death, which is usually brought about by some intercurrent disease. There is therefore usually no obligation on a medical man to specify alcohol as a cause of death, and as there is often an element of doubt, it is natural to give the deceased the benefit of it.

The deaths ascribed to cirrhosis of the liver form a rather better guide to the prevalence of alcoholic excess, and these numbered 23.

Evidence is gradually accumulating which strongly points to the terribly injurious effect which alcoholic excess on the part of one or both parents may have upon the after-health, and especially upon the mental capacity, of the offspring. Very significant figures have been published showing the high percentage of drunkards amongst the parents of idiot children ; other evidence points in the same direction and constitutes a terrible indictment of the evils of alcoholic excess.

It is clearly the duty of sanitary reformers everywhere to combine in fighting the abuse of alcohol as one of the greatest of all hindrances to the improvement of the national health.

POVERTY AND PUBLIC HEALTH.

The relationship between poverty and disease is so close, that some reference to it must be made in a report such as this, which has to deal with all influences affecting the physical health of the community. Although it would be outside our sphere to deal with the difficult and thorny questions of the *relief* or *causes* of poverty, it may be pointed out that the general effect of poverty on physical health and efficiency is unmistakably bad. It is sometimes said that poverty is good for " character " ; that is a philosophical and ethical consideration into which I cannot enter : I can only assert unreservedly that it is most detrimental to health, and wherever serious poverty abounds the death-rate will tend to be high.

Perhaps the most disquieting aspect of this question is the fact that poverty, in addition to taking an immediate toll in the shape of infant mortality, is apt to leave a permanent mark upon the children—the rising generation—and thus its untoward influence, though not always immediately seen, is projected, as it were, into the future. There is little doubt that if poverty could be eliminated from all those homes where the children of the nation are being reared, the effect upon the health of the community, both now and in the next generation, would be unmistakable.

For this reason the work of the Children's Aid Association in Leicester is, from a Public Health point of view, to be strongly commended, and it is permissible to hope that the good work it is doing, in providing food for underfed children, may be extended.

HOUSES UNFIT FOR HABITATION.

During 1908 44 houses were condemned as unfit for habitation, the cause, in almost every case, being dilapidation or dampness. In 36 cases the owners, on receipt of the customary notices, proceeded to put the houses into a proper condition ; one house was voluntarily closed by the owner ; one was closed by order of the Town Council ; and in six cases no steps had been taken at the time of writing.

In Leicester, in dealing with houses unfit for habitation, action is taken under Section 43 of the Leicester Improvement Act, 1881, rather than under Part II of the Housing of the Working Classes Act, 1890, the procedure under the local Act being simpler and more direct.

In addition to the houses condemned as unfit for habitation, 41 houses were certified by the Medical Officer of Health as filthy and unwholesome, and ordered to be cleansed. 386 other houses were cleansed by the owners upon receipt of informal notices from the Sanitary Inspectors.

SLAUGHTER HOUSES.

In addition to private slaughter houses, of which there are 72 in different parts of the Borough, Leicester possesses a Corporation Abattoir, situated on the Aylestone Road, comprising eighteen slaughter houses. Twelve of these were erected about thirty years ago, and the other six in 1896. Seventeen are let to private tenants, some of whom sub-let to others; whilst only one is reserved for casual slaughtering. The rent received amounts to between £300 and £400. The approximate number of animals slaughtered annually is—beasts 4,500; sheep 10,400; pigs 15,000. Both the private slaughter houses and those belonging to the Corporation have been repeatedly visited during the year by the Meat Inspectors.

PUBLIC SWIMMING BATHS.

Public facilities for bathing and swimming have such an important influence upon health that it is satisfactory to record that Leicester is well provided in this respect. There are four Corporation Swimming Baths, also two open-air Bathing Stations.

By arrangement with the Education Committee, the exclusive free use of the various baths is granted during certain hours, for the purpose of instruction in swimming and gymnastics, to the children attending the elementary schools in the Borough. The children are taken to the baths in the charge of responsible teachers and the Education Committee pay for the maintenance and washing of the necessary towels, &c.

WATER SUPPLY.

The present Water Supply of Leicester is upland surface water collected in three impounding reservoirs on the Charnwood Forest. The total area of the gathering ground is 10,760 acres. The reservoir at Thornton is the oldest and was constructed under the Act of 1847. The Bradgate reservoir was built next, under the Act of 1866, whilst that at Swithland was built under the Act of 1890. The total capacity of the three reservoirs is 1,379,000,000 gallons, supplying a population of over 278,000 persons.

The Water Supply undertaking was taken over by the Corporation in 1878.

Owing to the rapid growth of the town in recent years, it became imperative to provide for a further supply, and repeated efforts to obtain an adequate supply of good water in the neighbourhood of Leicester having failed, the great Derwent Valley Scheme was entered upon some years ago, by which Leicester, in conjunction with Sheffield, Derby, and Nottingham, is to obtain a magnificent supply of excellent water from the watershed of the River Derwent, in North Derbyshire. The vast works in connection with this great scheme are being pushed steadily forward, but it will be some time before the water reaches Leicester. When it does come the water problem for Leicester will be solved for many years. In the meantime the danger of a water famine, such as threatened in 1905, has been temporarily guarded against by an arrangement which has been entered into with the Loughborough Corporation for a supply of water from the Blackbrook reservoir, after the needs of Loughborough have been satisfied.

SEWAGE DISPOSAL.*

The sewage of the Borough of Leicester was first pumped up to Beaumont Leys Farm in the year 1890.

The total lift is nearly 170 feet above the outfall sewer.

The Belgrave Sewage Farm was abolished, and the sewage from the Belgrave district first pumped to Beaumont Leys Farm, in 1904.

The total lift in this case is 175 feet above the outfall sewer.

The total dry weather flow is about eight million gallons per day.

On reaching the Beaumont Leys Sewage Farm, the whole of the sewage is subjected to preliminary bacterial treatment for clarification before final purification on the land.

It is first passed through subsidence tanks, and then treated in first-contact bacteria beds, which cover an area of about twelve acres.

After this preliminary bacterial clarification, the sewage is finally purified by broad irrigation over about 1,350 acres of land, which consists largely of old pasture and rye grass.

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* The facts relating to Sewage Disposal have been kindly supplied by Mr. E. G. Mawbey, M.Inst.C.E., Borough Engineer.

The final effluent from the land is discharged partly into the River Soar, within the Borough, and partly into the Rothley Brook, on the Anstey side of the farm, which also eventually discharges into the River Soar.

The total area of the farm is 1,700 acres. The portion not available for sewaging is used for grazing when it is not convenient for the bullocks to be upon the sewaged area.

WORKMEN'S COMPENSATION ACT, 1907.

The Leicester Corporation acts as its own Insurance Company against risks incurred under this Act, all claims being dealt with by the Finance Committee, and allowances being paid out of a special fund.

The Medical Officer of Health acts as Medical Adviser to the Corporation in cases arising under the Act, and all important or doubtful cases, and all cases in which disablement continues for more than four weeks, are referred to him for examination and report.

This is a new duty which has arisen since the Act came into operation.

During the year the number of cases referred to the Medical Officer of Health was 50, or rather more than half of the total cases claiming under the Act.

The workmen were employed by the various Committees as follows :—

Sanitary Committee	16 cases.
Gas ,, ...	15 ,,
Highways and Sewers Committee ..	8 ,,
Markets Committee	4 ,,
Tramways ,, ...	3 ,,
Water ,, ...	2 ,,
Distress ,, ...	2 ,,
Total	50 cases.

Many of the cases had to be seen more than once—in some instances several times—the number of subsequent interviews being 48 (including cases seen for the first time in 1907).

Written reports were made in 46 cases, and 31 medical certificates as to ability to work were given. In nine instances the medical attendant had to be communicated with, and there was a certain amount of correspondence with the heads of the departments concerned.

In addition to the above, considerable time was taken up with one case (A. R. Bell) in which liability was disputed. This was the case of a workman suffering from varicocele, who alleged that the trouble was caused by, and dated from, an injury received through slipping and falling backwards when at work in a trench. An important principle was at stake, and it was decided to resist the claim, which was taken into Court. The case was an involved and complicated one, but ultimately we were able to prove that the trouble was an old-standing one, and a verdict was given for the Corporation.

There is considerable temptation under this Act for a workman to attempt to saddle employers with responsibility for old chronic troubles existing prior to the occurrence of some slight accident which is then alleged as the cause.

I am glad to say, however, that, so far, cases of malingering or attempts of this kind have not been common.

THE LEICESTER HEALTH SOCIETY.

The Leicester Health Society, now in the third year of its existence, continues to do useful work in co-operating with the Sanitary Committee in improving the health conditions of the town.

There are certain directions in which a voluntary society, such as this, can move better perhaps than a statutory body like the Sanitary Authority. In any case there must always be scope, in a large town, for voluntary effort and enthusiasm.

The Society's paid Health Visitor continues to devote a large part of her time to visiting and advising mothers whose babies are being fed at the Corporation Infants' Milk Depot, and she is of great assistance to the Medical Officer of Health in connection with the educational work of the Depot. One of the upstairs rooms at the Depot has been converted into an office, and set apart for her use.

Miss M. Matheson, whose good work for the Society as Health Visitor was greatly appreciated, left in July, having been appointed as Superintendent of a School for Mothers, in Manchester. She has been succeeded by Miss Wright.

In recognition of the useful work which the Health Society's official renders to the Corporation, the Sanitary Committee have agreed to pay a portion of her salary, and last year contributed £20 for this purpose.

CREMATION.

Leicester is one of the progressive towns which has provided facilities for cremation. The Leicester Crematorium is situated at the Gilroes Cemetery and forms an annexe to one of the Cemetery Chapels. The number of cremations which have been performed, since the Crematorium was opened in 1902, is shown below.

1902 (part of year)	1
1903	5
1904	8
1905	15
1906	12
1907	13
1908	14
Total	68

The number of British Crematoria is thirteen: five of them, viz., Hull, City of London, Bradford, Sheffield, and Leicester, are municipal undertakings, the remainder belonging to private companies. The total number of cremations performed in Great Britain during 1908 was 795, being an increase of 90 on the previous year.

A study of the names of the persons who have been cremated at Leicester (as elsewhere) clearly reveals the fact that at present cremation is almost entirely confined to persons of some intellectual distinction. It has not yet become popular with the masses. This, no doubt, helps to explain why cremation has not made more progress in those localities where facilities for it now exist. The fact remains, however, that it is making progress, for the number of cremations performed in this country during 1908 was fifty per cent. greater than five years ago.

On the Continent also it is increasing, the number of cremations performed in 1908 being 4,050, against 2,977 in 1907.

It is probable that cremations would be more numerous if the wishes of dying persons in regard to this matter were always fulfilled. It is very desirable that persons who wish to be cremated should leave written directions to that effect, and that they should also inform their executors of their wishes beforehand.

The fee for cremation at the Leicester Crematorium is £2 2s. for residents in Leicester and £5 5s. for non-residents.

KISSING THE BOOK.

Sanitarians have for long deprecated the insanitary and objectionable custom of "kissing the book" in connection with the administration of the oath to witnesses in our Courts of Law. Although it is now optional for witnesses to adopt the Scotch method of taking the oath, which obviates kissing the book, the latter method has not come largely into vogue, partly perhaps because it is rather more cumbersome than the old method and gives a little more trouble to both the officials and the witness.

It is interesting to note, therefore, that at the Salisbury Petty Sessional Court it has been decided to formally adopt the new form of oath, and to administer it to the police and other official witnesses, and to as many other persons as can be persuaded to take it.

HOUSE FLIES AND DISEASE.

The part played by flies, and especially by house flies, in the spread of disease is becoming more and more recognised, and it is possible that we shall ultimately find that they are the principal carriers of infection in some of the common infectious diseases, the mode of infection of which is at present, in the majority of cases, untraced.

Dr. H. E. Armstrong, M.O.H. for Newcastle, gives the following list of diseases which he believes may be spread by flies :—

Diarrhœa of Infants.
Enteric Fever.
Diphtheria.
Scarlet Fever.
Smallpox.
Measles.
Whooping Cough.
Plague.
Cholera.
Anthrax.
Tuberculosis.
Dysentery.
Glanders.
Erysipelas.
Ophthalmia.
Sleeping Sickness.
Swine Fever.
Ringworm.
Staphylococcal Abscess.

It has been proved experimentally that flies may carry on their legs and bodies vast numbers of various kinds of bacteria, and the habits of the fly are such as to secure the free distribution of them.

The rapidity with which flies can multiply, under favourable circumstances, is amazing. A single fly can produce, *theoretically*, over 2,000,000 descendants in a single season, provided suitable conditions as to temperature, food supply, &c., prevail.

As illustrating the swarm of flies which may exist, Dr. Hamer, in his report on this subject to the London County Council, gives a photograph of 5,000 flies, caught in 72 hours, on seven fly-papers in one room of 800 feet capacity, in a small general shop. Whilst catching flies in houses by means of fly-papers and fly-traps may act as a temporary palliative, the only way to effectually suppress the fly nuisance in towns is to prevent the multiplication of flies by abolishing their favourite breeding places.

The house fly, although it loves to haunt and spend the greater part of its life in houses (especially in warm kitchens, where food and drink is plentiful), goes outside to deposit its eggs. Its breeding places are accumulations of moist decaying organic matter, such as :—

Refuse heaps and tips ;
Stables, manure pits, and " depots " ;
Cow-sheds and cow-middens ;
Pail closets and privies ;
Ash-pits and refuse bins ;
Farm yards ;
All accumulations of decomposable refuse, rags, paper, sweepings, &c., &c.

The indictment against the house fly is certainly very strong, and the swarms of flies which prevail in most crowded neighbourhoods during the hot months of summer must be regarded as a public danger and nuisance. Although much is already being done by the Sanitary Committee in the direction of scavenging and refuse removal, it is probable that more frequent removal than at present is necessary to effectually prevent the breeding of these pests.

What is needed is a determined campaign in which the whole community should join.

Now that attention is being directed to the subject, our knowledge of the habits and life history of flies is increasing, and it is probable that we shall soon obtain more precise knowledge as to the best methods of suppressing them.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

Although in Leicester the work of Medical Inspection of School Children is carried on quite independently of the Health

Department, I am glad to say that a perfect understanding and co-operation exists between the two Departments, and no difficulty has been experienced. The fact that the Medical Officer to the Education Authority (Dr. Allan Warner) was for so long connected with the Health Department, as Resident Medical Officer at the Isolation Hospital, and Assistant Medical Officer of Health, has no doubt contributed to this satisfactory result and facilitated that smooth and harmonious working and absence of friction which is so desirable. It is understood that whilst the Medical Officer to the Education Authority is quite independent of the Health Department as regards his special work, yet in all questions in which the latter Department is legitimately concerned—*e.g.*, in matters connected with infectious disease—he shall consult and act in concert with the Medical Officer of Health.

The following procedure is adopted in order that the Departments may work together and assist one another as far as possible.

(1) In all cases where infectious disease is notified in houses where there are school children, a notice is at once sent by the Health Department to the Head Teacher of the school concerned.

(2) If the case is to be removed to the Isolation Hospital, the notice specifies how soon the other children may be allowed to return to school. If the case is treated at home, another notice is sent at the termination of the case after the house has been disinfected.

(3) A list is sent weekly to the Education Authority of all children discharged from the Isolation Hospital, specifying how soon after their return home they may be allowed to return to school. When it seems desirable that this time should be extended, the cases are seen by the Medical Officer of Health and special certificates given.

(4) On the other hand, the Head Teachers forward to the Health Department, through their own Department, particulars of any cases of notifiable infectious disease which may be discovered by them

(5) Lists of all children absent from school on account of non-notifiable diseases (measles, whooping cough, chicken pox, &c.) are forwarded to the Health Department every week.

(6) The names and addresses of children who are constantly found in a verminous condition are sent by the Education Department to the Sanitary Department.

(7) In any special matter concerning both Departments, the Medical Officer to the Education Authority confers with the Medical Officer of Health.

THE LEICESTER CORPORATION ACT, 1908.

This Act received the Royal Assent in August, 1908, but only came into force with the beginning of 1909.

Part V deals with the Milk Supply, and embodies what are known as the "Model Milk Clauses," conferring additional power in connection with milk and tuberculosis.

Part VII contains certain sanitary clauses, viz., for regulating the manufacture and sale of ice-cream; empowering the removal from the Cattle Market of animals suspected of tuberculosis, or which are old, emaciated, or diseased; relating to the provision of sanitary conveniences for workmen engaged on buildings; and relating to drains and sewers.

THE CHILDREN'S ACT, 1908.

This Act also received the Royal Assent during 1908, but did not come into force until April, 1909. It contains most important provisions concerning Infant Life Protection; the Prevention of Cruelty to Children; Juvenile Smoking, &c.

Under Part I, any person who undertakes for reward the nursing and maintenance of one or more infants under the age of seven years has to give notice of the fact to the Guardians, and it is the duty of the latter to appoint one or more persons to be Infant Protection Visitors. Another important provision is that persons undertaking the care of children for reward may not insure the lives of such children.

Under Part II, cruelty to or neglect of children is made a misdemeanour, with additional penalties if the person convicted is interested financially through insurance in the death of a child. It is made an offence for parents, when under the influence of drink, to take infants to bed with them. It is made an offence to allow a child under seven years to be in any room containing an open fire grate not sufficiently protected unless "reasonable precautions" are taken to guard against the risk of the child being burnt or scalded.

Part III is aimed at the suppression of the foolish and injurious habit of juvenile smoking; whilst amongst the miscellaneous clauses in Part VI are:—the imposition of penalties for giving intoxicating liquor to children, except in cases of sickness or upon a doctor's orders; the exclusion of children from the bars of licensed premises; the safety of children at entertainments; and the cleansing of verminous children. The last-named clause should materially strengthen the hands of the Education Authorities in a much-needed direction.

Altogether, the Act is the most important instrument for safeguarding the welfare of infants and young children that has ever been passed, and well deserves its title of "The Children's Charter."

APPENDIX I.

REPORT ON THE INFANTS' MILK DEPOT FOR 1908.

The year 1908 was the second completed year of the Milk Depot's existence, it having been opened in July, 1906.

At the end of 1907 the number of infants remaining on the books was 202; during 1908 632 fresh cases were received, 627 were discharged, leaving 207 infants on the books on December 31st, 1908.

Remaining on Books, Dec. 31st, 1907..	202	
Fresh Cases during 1908	632	
		834
Discontinued during 1908	627	
Remaining on Books, Dec. 31st, 1908..	207	
		834

The maximum number on the books was reached in October, when it was 209, and the minimum in April, when it was 174.

Three of the cases came from outside the Borough, a small extra charge being made in these cases.

We have now had 23 "second" babies brought to the Depot, *i.e.*, the second baby of the same mother. There have even been three cases of the *third* baby; this figure will no doubt increase when the Depot has been longer in existence.

The figures show a slight falling off in fresh admissions (632 against 672) as compared with the previous year. The average time each infant remained on the Depot was 15 weeks, or excluding the cases which remained for not more than a week, 19 weeks. The average number of cases on the books was 195 against 102 in 1907.

Classifying the completed cases during 1908 according to the time they remained on the Depot, we find:—

Period on the Depot. Not more than	Number of Cases.
1 week	136
2 ,,	61
4 ,,	52
2 months	74
3 ,,	50
4 ,,	23
5 ,,	30
6 ,,	23
7 ,,	27
8 ,,	18
9 ,,	22
10 ,,	34
11 ,,	26
12 ,,	14
Over 12 ,,	37
Total	627

305 of the cases were sent by medical men. Most of these infants were sent either because they were ill or not thriving.

Excluding the 136 cases which did not have the Depot Milk for more than a week (as these include infants brought to the Depot in a hopeless condition), there were 26 deaths of infants whilst on the Depot. The average time these cases had been on the Depot was eleven weeks. Only four of these cases had been in good health at the time they were first brought to the Depot, the remainder being ill or not thriving. Three of the deaths were caused by measles.

Co-operation of the Health Society.

The Leicester Health Society, which has evinced so much interest in the subject of infant life preservation generally and the work of the Milk Depot more particularly, ever since its formation, has continued to co-operate with the Sanitary Committee; and the Society's Health Visitor has continued to devote a large portion of her time to visiting the homes of Depot-fed infants and to assisting the Medical Officer of Health on the two afternoons a week when the babies are weighed.

In recognition of the services rendered by the Health Society's Official at the Milk Depot, the Sanitary Committee pay a portion of her salary.

And of the Charity Organisation Society

The Leicester Branch of the C.O.S. have also continued their co-operation, and have paid for milk for twenty cases, for an average of ten weeks per case, the total amount paid during the year being nearly £16. A small reduction in the charge is made on all cases paid for by the C.O.S.

And also of the Guardians.

The Relieving Officers, on the recommendation of the District Medical Officers, have granted the Depot milk to 37 cases, the average length of time per case being 4½ weeks, and the amount paid being nearly £15.

Private Charitable Fund.

In addition to the above, several cases, not serious enough—or not suitable—for the C.O.S., have been assisted from a fund chiefly provided by small donations from grateful mothers, and by gifts from a few friends interested in the work of the Depot. The amount received during the year was £4 7s. 1d. ; £4 0s. 7d. was spent, leaving 6s. 6d. in hand.

DELIVERY OF MILK.

The system of delivering milk (for an extra charge of 6d. per week) through the Tramways Parcel Department, has been continued and has worked satisfactorily.

ARRANGEMENT WITH THE LEICESTERSHIRE DAIRY COMPANY.

The arrangement with the above company, under which they prepare and sterilise the humanised milk, has been continued, but owing to the great reduction in amount (owing to the increase in the use of dried milk) they were granted an increase in the price paid, and are now receiving 1s. 2d. instead of 1s. per gallon.*

DRIED MILK.

During the year the use of Dried Milk (manufactured by the *Just-Hatmaker* process), which was begun towards the end of 1907, has been greatly extended, and at the end of 1908 nearly two-thirds of all the babies at the Depot (about 130 out of 200) were being fed on it exclusively. Its great advantage—and an all important one—is that it is more digestible, and many infants who are unable to keep down fresh milk will easily retain dried milk. The improvement in the general condition of an infant not thriving on fresh milk when put on dried milk is often most striking and gratifying, and there are few infants who will not do well on it. It is noticeable, too, that infants show a preference for it, and after being fed for a time on it they may refuse to take fresh milk. Moreover, owing to its convenience, it is very popular with the mothers, and it is very rare that they wish to change back to the humanised milk after once using it.

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* The Sanitary Committee provide all bottles, stoppers, baskets, packing cases, &c., and the Dairy Company wash bottles and prepare milk, and deliver at the Milk Depot.

A careful watch has been kept for any symptoms of scurvy-rickets, or other unfavourable symptoms, but although a number of infants have been fed continuonsly on the dried milk for many months at a time, we have so far seen nothing which would justify the fear, expressed by some, that its continued use is detrimental to health. As a precaution, mothers are advised to give a teaspoonful of orange or grape juice three or four times a week, but it is doubtful how far it is really necessary.

If, after further trial, dried milk justifies present hopes, it is likely to prove an immense boon to the poorer classes, and bids fair to drive many of the objectionable "patent" foods, prepared from starch, off the market. It equally possesses the advantage of cheapness and convenience, whilst being immensely superior from a nutritive point of view.

We have found that a mixture of "full cream" and "half cream" milk, with the addition of 11 per cent. of best castor sugar—the mixture containing about 17 per cent. of fat—appears to be very suitable for infants under six months of age; whilst for infants above that age we give "full cream" milk similarly sweetened, and containing 21 per cent. of fat.

We are able to retail these mixtures at 10d. and 1s. per lb., and at this price it costs about the same to feed an infant as if fresh cow's milk be purchased from a dairy.

Amongst the advantages which dried milk possesses over fresh milk may be mentioned that it does not turn sour, but will keep good for months; that it is practically germ free (tubercle bacilli are destroyed in the process of manufacture), and is not liable to contamination by flies, &c. Longer experience, however, is desirable before a final conclusion is arrived at as to its value as a universal food for infants.

The following are details of some cases fed on dried milk :—

Edward S. P——, (Reg. No. 425) 14 weeks old. Sent to Depot by medical man ; baby very ill ; no food seemed to suit. Was put on dried milk and made excellent progress. Continued for nine months, increasing from 11 lbs. 1 oz. to 22 lbs. 5 ozs., average monthly increase being 1 lb. 4 ozs. At twelve months old child looked picture of health.

Wm. and Robert L——, twins (Reg. No. 32). Brought to Depot when eleven weeks old as food did not seem to agree. Were given humanised milk at first, but at end of a month, as William was not improving, they were put on dried milk and both then made excellent progress, increasing in six months from 8 lb. 1 oz. and 8 lbs. 3 ozs. to 15 lbs. 2 ozs. and 15 lbs. 8 ozs.

Ruby J—— (Reg. No. 226). Brought to Depot when only twelve days old and placed on humanised milk. After two weeks, as she was not making much progress, was changed to dried milk and then made steady progress, continuing for over twelve months. She was then looking the picture of health and had increased from 8 lbs. 15 ozs. to 22 lbs. 9 ozs.

BOROUGH OF LEICESTER.

INFANTS' MILK DEPOT.

Receipts and Payments during year ended 31st March, 1909.

	£ s. d.	£ s. d.
PAYMENTS.		
Wages	71 7 0	
Purchase of Milk	*699 2 9	
Delivery of Milk	69 1 1	
Bottles, Stoppers, Baskets, &c. ..	64 3 9	
Rents, Rates and Insurance	47 16 0	
Fuel, Light and Water	15 0 2	
Telephone	8 14 6	
Printing, Stationery and Sundries ..	45 0 10	
Health Visitor (part salary)	20 0 0	
		1,040 6 1
RECEIPTS.		
Sale of Milk, &c.		872 11 7
Net Cost		£167 14 6

W. PENN-LEWIS,

27th April, 1909. *Borough Treasurer.*

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* Includes £271 8s. 3d. for Dried Milk.

APPENDIX II.

REPORT

ON THE

BOROUGH ISOLATION HOSPITAL

For 1908,

By JAMES FAIRLEY, M.B.

On 31st December, 1907, there were 174 patients remaining in the Hospital. During the year 1,099 patients were admitted, 1,070 were discharged, and 36 died, leaving 167 in hospital on December 31st, 1908.

The number of admissions was 321 less than in 1907, this being due mainly to a reduction in the number of scarlet fever cases. Thus there were 330 less cases of this disease.

The particulars of the admissions are as follows :—

Scarlet Fever	866
Diphtheria	92
Enteric Fever	29
Phthisis	91
Other Diseases	21
Total	1,099

SCARLET FEVER.

As already mentioned, the number of cases of this disease compared with last year shows a satisfactory diminution. Except for a rise in March, when 86 patients were admitted, the number of admissions diminished steadily each month until August, when only 50 cases were admitted. After this, the number rose again, the monthly average for the last four months being 83.

The type of disease continued to be mild, only 19 deaths occurring during the year. This gives a case mortality of 2·2 per cent., compared with 3 per cent. last year and 2·5 per cent. in 1906.

Of the fatal cases, 13 were under five years of age, 3 between five and fifteen years, and 3 above this. In one of these last (age seventeen years) the case was complicated by a dog bite, and an inquest was held. The two others were women, aged twenty-one and twenty-eight respectively: both were malignant cases and died three days after admission. Two other cases are noted as being malignant, in children aged fourteen months and four years. The other fatal cases were all of the anginous type. Two cases died after resection of rib had been performed for empyema, and two from acute nephritis and adenitis.

The average period of isolation was 48 days.

DIPHTHERIA.

There were 92 admissions, compared with 102 in 1907 and 166 in 1906. Of these cases nine died, giving a case mortality of 9·8 per cent. The age of the fatal cases ranged from two to eight years. Two of these died within ten minutes after admission and two others within two days. Three of the fatal cases suffered from other diseases coincidentally with the diphtheria—one having scarlet fever and two measles.

The fatal cases may be classified as follows:—

* Toxaemia from the disease	5
† Laryngeal obtruction (arrived moribund)	2
Broncho-Pneumonia	1
Post-Diphtheritic Paralysis (cardiac failure)	1

The average period of isolation this year was high, viz., 49·8 days; the reason for this probably being that a larger proportion of cases shewed signs of post-diphtheritic paralysis, and some of these required prolonged detention in hospital.

Operation for laryngeal obstruction was required in seven cases, intubation being the operation invariably employed. All of these cases recovered. One case which had tracheotomy performed at the General Infirmary was admitted to the Isolation Hospital to be nursed. It made a good recovery.

Includes one with measles and one with scarlet fever.

† Includes one with measles.

ENTERIC FEVER.

There were 29 cases sent into hospital as enteric fever, but of these five proved to be suffering from other diseases, leaving 24 genuine cases of enteric fever. Of these 24 cases, four died, giving a mortality of 16·6 per cent. Of the deaths, two were due to perforation and two to enteric fever complicated by pneumonia. One of the former had perforated twelve hours before removal to hospital and died within twenty-four hours of admission.

The average period of isolation was 61·7 days.

Of the cases which did not prove to be enteric fever, the diagnosis was as follows :—

In 1 case, tuberculous peritonitis.
,, 1 ,, pneumonia (probably tuberculous), developed empyema in hospital.
,, 1 ,, general tuberculosis (fatal).
,, 1 ,, nil.
,, 1 ,, no definite diagnosis was arrived at.

OTHER DISEASES.

Of those admitted as "other diseases," seven were cases of measles admitted under special circumstances, and nearly all the others were cases of erysipelas.

PHTHISIS.

Ninety-one cases were admitted as against 82 in the previous year, and 69 in 1906. The average length of stay in hospital was 60·8 days, as against 65·6 days last year.

The same practice as regards admission was adhered to. Cases after being notified by a medical man are examined at the hospital, and, if considered suitable, are admitted for a period of one month. At the end of a month if it be considered that a longer stay would assist towards permanent cure, they are kept for a further period of one or two months. During their stay they become acquainted with the principles and practice of open-air treatment, and almost invariably their general condition shows a decided improvement. Thus, of the 91 cases discharged last year, 88 increased in weight, the average gain being a little over 9 lbs.

The tendency is for us to keep fewer patients beyond the first month, and this for three reasons:—

(*a*) The primary object of taking phthisis cases at the Isolation Hospital is educational, and of course this object is gained in one month as thoroughly as in three.

(*b*) Increased number of applications—last year, 210.

(*c*) As the result of enquiries among, and, in many cases, examination of former patients, it is evident that if the immediate improvement which takes places in nearly all cases is to be maintained, much more depends on the after-treatment—on how the patients conduct themselves after leaving the hospital—than on any prolongation of stay under hospital regime.

BACTERIOLOGY.

The work in the Laboratory was heavier than in any previous year, a large number of specimens being examined for suspected enteric fever, diphtheria, or phthisis.

STAFF.

During the year two nurses and one maid developed scarlet fever. One nurse developed diphtheria. One had erysipelas. The above were all mild cases.

One of the nurses developed signs of phthisis and also one of the maids. Both of them had a tubercular family history, but it should be added that the latter had been for sixteen months the ward maid in the consumptive block before any symptoms showed themselves. Both underwent the open-air treatment and are now back on duty again.

HONORARY CHAPLAIN.

Canon Gedge has continued his good work at the hospital, where his great kindness is much appreciated.

JAMES FAIRLEY,

Resident Medical Officer.

GIFTS TO THE HOSPITAL

DURING 1908.

Baker, Mrs. Doll and Bed.
Chamberlain, Mrs. Dolls.
Dale, H. R. and D. Toys.
Ewing, Master. Books.
Ellis, Mrs. (Granby Street). Toys.
Fitch, Mrs. Toys, &c.
Gedge, Canon. Dolls, Socks, Vests, &c.
Haines, Mrs. Dolls and Carriage.
Hodgson, Miss. Magazines.
Horne, Mrs. Books and Toys.
King, Miss N. Doll and Books.
Mayor, The (Ald. C. Lakin). Magazines and Pictures.
Midland Educational Company. Books.
Mitchell, Messrs. Toys.
Pears, Mrs. Books and Cards.
Peach, H. H. Toys.
Peasland, Mrs. Magazines.
Potter, Miss. Wool Clothing, Books, &c.
Primitive Methodist School, Fosse Road. Flowers.
Roberts and Roberts, Messrs. Sweets, Fruits, &c.
St. Michael's Vicarage. Flowers.
Tomlinson, Mr. Magazines.
Viccars, Mrs. W. P. Books.
Wyggeston Girls' School. Toys.

SUBSCRIPTIONS TO TOY FUND :—

	£	s.	d.
Bowmar, W. H.	2	0	0
Smith, Mr. (Donisthorpe)..	0	10	0
Anonymous	0	10	6
Tarratt, Chas.	0	5	0
Irons, A.	0	5	0
Fowkes, F. H.	0	2	6
Anonymous	0	2	6

TABLE A.

Number of Patients Admitted, Discharged, and Died during 1908.

DISEASE.	Remaining, 31st December, 1907.	Admitted during Year.	Discharged during Year.	Died during Year.	Remaining, 31st December, 1908.
Scarlet Fever	132	866	851	19	128
Diphtheria	14	92	83	9	14
Enteric Fever	10	29	25	5	9
Phthisis	15	91	91	1	14
Other Diseases	3	21	20	2	2
TOTAL	174	1099	1070	36	167

TABLE B.

Showing, for the different diseases, the number of patients admitted, the average number in Hospital each day, and the average stay in Hospital.

	Scarlet Fever.			Diphtheria.			Enteric Fever.			Smallpox.		Phthisis.			Other Diseases.		Total.		
	No. of Patients Admitted.	Average Patients in Hospital Each Day.	Average Days' Stay per Patient.	No. of Patients Admitted.	Average Patients in Hospital Each Day.	Average Days' Stay per Patient.	No. of Patients Admitted.	Average Patients in Hospital Each Day.	Average Days' Stay per Patient.	No. of Patients Admitted.	Average Days' Stay per Patient.	No of Patients Admitted.	Average Patients in Hospital Each Day.	Average Days' Stay per Patient.	No. of Patients Admitted.	Average Days' Stay per Patient.	No. of Patients Admitted.	Average Patients in Hospital Each Day.	Average Days' Stay per Patient.
1901	491	54·4	40·5	592	49·4	30·5	60	7·4	45·4	4	29·0	—	—	—	—	—	1147	111·7	35·5
1902	588	72·4	45·0	183	20·7	41·3	54	6·0	40·6	18	37·7	—	—	—	—	—	843	101·0	43·7
1903	130	16·0	45·0	47	3·4	26·5	24	3·3	50·4	388	32·2	63	6·8	30.5	—	—	652	63·8	35·7
1904	239	28·1	43·0	26	2·1	30·5	37	4·5	45·0	293	29·6	121	10·4	31·6	—	—	716	69·1	35·2
1905	739	82·4	40·7	89	6·3	26·1	43	5·3	45·2	5	35·0	157	16·0	37·3	—	—	1037	111·0	39·0
1906	1471	172·5	42·8	166	14·0	30·8	58	7·2	45·5	1	6.5 30	69	10·5	56·0	2 (Ery.)	65.0	1765	204·4	42·2
1907	1196	154·5	47·1	102	8·1	29·1	35	5·0	52·1	—	—	82	14·7	65·6	5	19·1	1420	182·6	46·9
1908	866	149·3	48·1	92	12·5	49·8	29	4·9	61·7	—	—	91	15·2	60·8	21	18·6	1099	147·8	49·1

TABLE C.

BOROUGH OF LEICESTER. ISOLATION HOSPITAL.

Receipts and Payments during year ended 31st March, 1909.

	£	s.	d.	£	s.	d.
PAYMENTS—						
Resident Medical Officer's Salary	126	5	2			
Matron's Salary	60	0	0			
Wages	1754	3	3			
Provisions	1444	16	9			
Mineral Waters, etc.	5	18	7			
Domestic Utensils	43	0	0			
Bedclothing, Towelling, etc.	133	19	10			
Furniture and Fittings	93	15	0			
Fuel, Light, and Water	906	4	3			
Rates and Fire Insurance	276	5	6			
Alterations and Repairs	350	15	7			
Horsehire	121	12	0			
Telephone	17	13	0			
Drugs, Disinfectants, etc.	186	4	3			
Advertising, Printing, etc.	32	15	9			
Labour, etc. at Grounds	44	2	5			
Brushes, Soap, and Miscellaneous	112	18	10			
				5710	10	2
LESS RECEIPTS—						
Maintenance of Patients	*148	10	0			
Part Pumping Expenses Repaid	75	0	0			
Miscellaneous	40	18	7			
				264	8	7
Net Expenditure				£5446	1	7

W. PENN-LEWIS,

27th April, 1909. *Borough Treasurer.*

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* Includes £121 for maintenance of Consumptive Patients.

TABLE D.

BOROUGH OF LEICESTER—SANITARY COMMITTEE.

Cost of administration of Isolation Hospital (exclusive of Buildings, &c.) for each of the five years ending 31st March, 1909, with average cost of each item per patient-day.

PARTICULARS.	Year 1904-5.					Year 1905-6.					Year 1906-7.					Year 1907-8.					Year 1908-9.				
	Amount.			Average cost per patient-day.		Amount.			Average cost per patient-day.		Amount.			Average cost per patient-day.		Amount.			Average cost per patient-day.		Amount.			Average cost per patient-day.	
	£	s.	d.	s.	d.	£	s.	d.	s.	d.	£	s.	d.	s.	d.	£	s.	d.	s.	d.	£	s.	d.	s.	d.
Wages	1,587	17	5	1	3·10	1,716	11	5	0	10·17	1,784	16	9	0	5·74	1,736	5	5	0	7·07	1,754	3	3	0	8·11
Mineral Waters, &c. ..	30	14	1	0	0·29	18	0	9	0	0·11	9	16	2	0	0·03	7	18	7	0	0·03	5	18	7	0	0·03
Provisions	1,319	18	5	1	0·55	1,117	19	2	0	6·63	1,352	6	11	0	4·35	1,310	1	6	0	5·33	1,196	19	3	0	5·53
Meat	551	3	6	0	5·24	329	14	2	0	1·95	335	2	3	0	1·08	252	15	10	0	1·03	247	17	6	0	1·15
Furniture, &c. ..	237	14	5	0	2·26	291	9	7	0	1·72	338	7	2	0	1·09	252	8	5	0	1·03	227	14	10	0	1·05
Utensils	45	13	0	0	0·43	39	1	9	0	0·23	35	9	6	0	0·11	32	5	2	0	0·13	43	0	0	0	0·20
*Fuel	636	11	0	0	6·95	702	0	3	0	4·16	712	4	11	0	2·29	802	9	2	0	3·27	802	0	8	0	3·71
Light	122	9	1	0	1·17	80	17	9	0	0·48	92	16	3	0	0·30	68	18	9	0	0·28	65	19	4	0	0·30
Water	35	14	4	0	0·34	18	13	1	0	0·11	26	11	5	0	0·09	37	9	3	0	0·15	38	4	3	0	0·18
Drugs, &c.	154	18	2	0	1·47	130	1	11	0	0·78	197	13	8	0	0·63	159	9	7	0	0·65	186	4	3	0	0·86
Labour, &c. (Grounds)	360	13	9	0	3·43	224	3	2	0	1·33	39	11	11	0	0·13	53	5	2	0	0·21	44	2	5	0	0·20
Miscellaneous ..	222	8	5	0	2·12	192	16	8	0	1·12	175	1	2	0	0·56	130	1	6	0	0·53	145	14	7	0	0·67
Yearly Totals of above items	5,305	15	7	4	2·45	4,861	9	8	2	4·79	5,099	18	1	1	4·40	4,843	8	4	1	7·71	4,757	18	11	1	9·99
Less—Receipts ..	88	7	5	0	0·84	109	8	2	0	0·64	255	2	9	0	0·83	284	5	0	0	1·15	264	8	7	0	1·22
Net Yearly Cost ..	£5,217	8	2	4	1·61	£4,752	1	6	2	4·15	£4,844	15	4	1	3·57	£4,559	3	4	1	6·56	£4,493	10	4	1	8·77
No. of Patient-days ..	25,240					40,515					74,636					58,964					51,912				

W. PENN-LEWIS, *Borough Treasurer.*

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* For details of Fuel see Table E.

TABLE E.

DETAILS OF FUEL used during the five years ending 31st March, 1909 (included in Table D).

Particulars.	Rate per Ton.	Year 1904-5.		Year 1905-6.		Year 1906-7.		Year 1907-8.		Year 1908-9.	
		Weight.	Value.	Weight.	Value.	Weight.	Value.	Weight.	Value.	Weight.	Value.
	s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.	T. C. Q.	£ s. d.
Coal	9 -	—	—	—	—	—	—	667 0 0	300 3 0	—	—
„	9 4	—	—	—	—	—	—	—	—	81 3 2	37 17 8
„	9 5½	—	—	—	—	78 17 2	37 6 0	66 9 1	31 8 9	—	—
„	9 6	—	—	207 17 1	98 14 8	65 4 3	30 19 8	288 12 1	137 1 10	1065 5 3	506 0 4
„	9 9	—	—	—	—	—	—	—	—	106 5 1	51 15 10
„	10 3	68 4 2	34 19 3	56 2 1	28 15 2	—	—	—	—	—	—
„	10 6	210 0 3	110 5 8	—	—	—	—	—	—	—	—
„	10 9	—	—	—	—	—	—	101 8 3	54 10 0	—	—
„	11 9	—	—	—	—	9 1 3	5 6 8	3 10 1	2 1 3	—	—
„	12/-	—	—	31 1 3	18 12 10	13 12 3	8 3 9	—	—	—	—
„	12 2	—	—	—	—	—	—	69 1 2	42 0 5	73 6 3	44 12 5
„	12 9	—	—	—	—	9 10 3	6 1 7	13 3 2	8 8 1	—	—
„	13 6	31 7 0	21 3 2	13 5 1	8 19 0	—	—	10 13 2	7 4 3	—	—
„	13/9	—	—	—	—	—	—	—	—	21 9 3	14 15 7
„	14 3	—	—	—	—	—	—	8 1 2	5 15 1	10 19 3	7 16 6
„	14 6	12 0 0	8 14 0	—	—	—	—	—	—	—	—
Slack	8 2	—	—	—	—	278 6 1	113 12 11	427 0 3	174 7 8	—	—
„	8/3	148 7 3	61 4 3	1325 11 3	546 18 7	1151 10 3	475 0 4	—	—	—	—
„	8 6	941 13 3	400 4 8	—	—	—	—	—	—	—	—
„	8 9	—	—	—	—	41 10 1	18 3 4	90 3 0	39 8 10	—	—
„	8 11	—	—	—	—	—	—	—	—	308 6 3	137 9 4
„	9 -	—	—	—	—	38 19 1	17 10 8	—	-	—	—
Firewood, &c.	—	—	—	—	—	—	—	—	—	—	1 13 0
		1411 13 3	£636 11 0	1633 18 1	£702 0 3	1686 14 0	£712 4 11	1745 4 1	£802 9 2	1666 17 2	£802 0 8

APPENDIX III.

PUBLIC ANALYST'S REPORT

For the Year 1908.

Town Hall, Leicester,
March, 1909.

To the Chairman and Members of the Sanitary Committee.

Gentlemen,

My Report as Public Analyst for the year 1908 is as follows :—

The total number of samples purchased by your Inspectors under the Food and Drugs Act and submitted for analysis was 403. The nature of the samples is given in Table A.

As is usually the case, the principal articles sampled were milk and butter.

Milk.—192 samples of milk were examined, and of these eight were certified as being below the legal standard. In six of these there was a deficiency of fat, and in two there had been, presumably, an addition of water. In three cases the Vendor was cautioned by your Committee. In another case the Vendor sent a letter of explanation which your Committee accepted as being satisfactory. In two other cases, no action was taken as there were grounds for believing that the samples, which came originally from the same source, had been tampered with before reaching the actual vendor. In the remaining two cases—Nos. 24 and 88—a prosecution was authorised but was not proceeded with. It was found that in the one case the milk had been purchased under a warranty, and in the other case the farmer's man came forward and admitted tampering with the milk before it came into the possession of the actual vendor.

Legally, the actual vendor of a sample is the person responsible ; and it is to be feared that occasionally the guilty party escapes and an innocent person pays the penalty.

Preservatives.—36 samples of milk were examined for boron preservatives and all were found to be free. Since the issue by your Committee to the Milk Trade of the circular prohibiting the use of preservatives in milk, I believe that the practice of using boron compounds, so far as milk is concerned, has been almost entirely abandoned in Leicester. They are still used in cream, but here the practice is open to much less objection, especially if the fact be dec'ared on the label (as is now usually done), and the amount be limited—as recommended by the Departmental Committee—to one-quarter per cent. (a little over 20 grains per pint).

Other Samples.—In addition to the samples submitted by the Inspectors, a number of samples of the humanised milk and dried milk supplied to the Infants' Milk Depot were examined. Also six samples of water from the Corporation reservoirs, sent by the Water Engineer ; and one sample of water from a private well. These were found to be satisfactory.

I wish to add that I find it increasingly difficult to spare as much time as I should like to devote to my work as Public Analyst. Moreover, my laboratory work is necessarily liable to frequent interruptions by other work, which adds to the difficulty of carrying it on efficiently.

I append the usual Tables.

Your obedient Servant,

C. KILLICK MILLARD,

Public Analyst.

TABLE A.

Summary showing Number of Samples Analysed during 1908.

Nature of Samples.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total for Year.	
	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.	Samples taken.	Found Adulterated.
Milk	60	5	48	3	24	0	60	0	192	8
Butter	24	0	36	0	24	0	73*	0	157*	0
Coffee	6	0	..	..	6	0	6	0	18	0
Mustard	6	0	12	0	6	0	..	..	24	0
Spirits	..	..	..	..	..	..	6	..	6	0
Baking Powder ..	..	..	..	..	..	..	6	..	6	0
Total ..	96	5	96	3	60	0	151	0	403	8

* Includes 70 samples of butter taken by Inspectors informally.

TABLE B.

Particulars of Adulterated Samples in 1908.

No. of Sample.	Nature of Sample.	Nature and Amount of Adulteration.	Remarks, Action taken, &c.
14	Milk ..	6·6 per cent. deficient in fat ..	Vendor cautioned.
24	Milk ..	5·0 per cent. of added water ..	Prosecution ordered, but not proceeded with, as milk purchased under a warranty.
82	Milk ..	9·0 per cent. deficient in fat ..	Vendor cautioned.
88	Milk ..	30·0 per cent. deficient in fat ..	Prosecution. Summons withdrawn.
95	Milk ..	10·0 per cent. deficient in fat ..	Explanation of Vendor accepted.
145	Milk ..	13·0 per cent. deficient in fat ..	Special circumstances ; no action taken.
147	Milk ..	12·7 per cent. of added water ..	Special circumstances ; no action taken.
150	Milk ..	10·0 per cent. deficient in fat ..	Vendor cautioned.

APPENDIX IV.

CHIEF INSPECTOR'S REPORT

UPON THE

WORK OF THE SANITARY DEPARTMENT

DURING 1908.

To the Medical Officer of Health.

Sir,—Herewith I beg to hand you my report upon the work carried on in the Sanitary Department during the year 1908, together with statements setting forth the details thereof.

I am, Sir,

Yours faithfully,

FRANCIS BRALEY, Cert. San. Inst.

19th April, 1909.

The decrease in the number of house-to-house inspections is in great measure due to the female inspectors having ceased to do house-to-house inspection and devoting their time to visiting and re-visiting houses where births have recently been reported.

On reference to Statement G, it will be seen that a large quantity of food has been condemned by the inspectors, the same being unwholesome and unfit for human food. Its condemnation by the inspectors has been due to their having been requested by the owners to examine the same; after inspection it has been voluntarily surrendered and burnt at the refuse destructors.

A stallholder in the Market Place had a quantity of tomatoes exposed for sale which were unfit for human food; he was summoned before the Magistrates and fined 20s., or fourteen days' imprisonment.

There are 50 cowsheds in the Borough occupied by 512 cows; the inspectors have made 289 visits during the year; special attention has been given with a view to detect any animal suffering from tuberculosis, but none were found. Ten informal notices served on owners to relay floors and repair paving have been complied with. The sheds were white-washed twice during the year. There are 127 Canal Boats on the Register; one boat has been registered during the year, 120 have been inspected; there were no cases of infectious disease found upon any of them. The 120 boats were occupied by 215 males, 71 females, 29 children under five years of age, and 32 over. The boats were found in good condition, clean and well kept.

3,508 observations were taken of factory chimneys during the year, and 47 informal notices were sent to manufacturers, the chimneys on whose premises emitted black smoke in such quantities as to be a nuisance, but not exceeding the time limit allowed by the Committee.

STATEMENT A.

Showing the work done by the Sanitary Staff during the Year 1908, and also in 1907.

	No. of Visits.	
	1908.	1907
Systematic House to House Inspections	16,488	26,797
Investigations of Complaints	21,627	19,201
Visits to ascertain the progress of Sanitary and Informal Orders	18,139	17,061
Visits in connection with Contagious Diseases	7,790	9,449
Visits to Common Lodging Houses	711	937
Visits to Bakehouses	558	552
Visits to Canal Boats	162	91
Visits to Workshops	969	524
Visits to Ice Cream Shops	20	14
Visits to Refreshment Room Kitchens	19	10
Visits to Fish Shops	131	153
Visits to Caravans	149	138
Visits to Tripe Houses	2	12
Visits to Marine Stores	10	30
Visits to Home-workers	340	628
Visits to Births	5,007	2,020
Visits to Dairies and Milk Shops	178	499
Visits to Cowsheds	289	236
	72,589	78,352
Samples of Food, &c., purchased for Analysis under Adulteration Acts	409	416
Observations for the purpose of Smoke Prevention	3,508	3,866
Stacks reported for Smoke Nuisance	47	70
Houses Disinfected by the Sanitary Staff	1,658	2,441
Swine reported to Medical Officer of Health	124	80
Filthy Houses ditto ditto	56	65
Dilapidated Houses ditto ditto	61	70
Prosecutions under the Public Health and Local Acts	1	4
Letters (including Complaints of Nuisances) received	3,545	3,074
Letters (including School and Sanitary Notices) sent out from the Offices	6,032	7,908
Drains Tested (Smoke and Fluid)	513	746

STATEMENT B.

During the year Formal and Informal Notices have been served to abate Nuisances as follows:–

	No. of Orders.
To abolish Manure-pits and Ash-pits	148
,, repair ditto ditto	2
,, provide Ash-tubs or Bins	2279
,, erect New Water Closets	11
,, fix Closet Hoppers and Syphons	95
,, fix Flushing Apparatus and lay on Water Supply	60
,, repair ditto and ditto	62
,, alter and ventilate Soil Pipes	4
,, stop up or disconnect Cellar Drains	3
,, lay New Drains	1
,, relay or repair Defective Drains	108
,, clear Choked Drains	402
,, cleanse or repair Cisterns	32
,, fix lead or iron Sink Wastes	25
,, fix Traps or Gully Gratings	89
,, reset Gullies or provide new Gratings	36
,, erect, alter, screen, or repair Urinals	27
,, repair, rehang, or provide new Doors for Closets and Dwellings	39
,, repair, renew, and make good Spouting ..	186
,, cleanse and limewash Closets and Passages ..	158
,, pave Yards and Passages, or repair Paving ..	195

STATEMENT B.—Continued.

	No. of Orders.
To provide new or relay and repair Floors ..	113
,, repair Roofs	134
,, cleanse and limewash Houses	427
,, ventilate Dwellings	5
,, remove Manure and Offensive Matter	14
,, remove Animals kept in such a condition as to be a Nuisance	11
,, alter Chimneys and Miscellaneous	206
,, reduce Number of Persons occupying Houses ..	17
,, repair Staircases	16
,, fix 4-inch Ventilating Pipes	4
,, repair Walls	85
,, insert Damp Proof Courses	81
	*5075

* The 5075 Defects ordered to be remedied were contained in 4113 Notices, and of these 284 were Formal and 3829 Informal Orders.

STATEMENT C.

Showing the Localities of Sewer Gas Escapes.

Into Breakfast Rooms, Sitting Rooms, and Dining Rooms	5
,, Houses from Rat Holes	2
,, Kitchens and Sculleries	6
,, Basement Kitchens and Cellars .. .	14
,, Lobbies and other parts of Houses	8
,, Internal Water Closets	3
,, External Water Closets	111
,, Yards, from around badly set Gullies, defective Drains, etc.	115
From External and unventilated Soil Pipes ..	12
,, Heads and Joints of downright Rain Water Pipes	20
,, Untrapped Rain Water Cisterns	7
,, Gullies in Stables	1
,, Ventilating Pipes	19
	323
And in connection with Houses in which Infectious Diseases have arisen	89
Total	412

STATEMENT D.

In connection with Infectious Diseases Inspection, the following defects were found, either in the houses referred to in the certificates, or in the houses, closets, etc., in the same yard.

	No.
Defective and Foul Ashpits	10
,, and dilapidated Closets	1
,, and choked Drains	14
,, and unventilated Soil Pipes	1
,, Urinal, Bath and Lavatory Wastes ..	2
,, Paving and Surface Channels	15
,, Untrapped or badly set Gullies to Sink and Yard Drains	9
,, Water Closet Hoppers and Flushing Apparatus	9
,, Spouting	8
Foul Brick and Defective Shafts to Sinks	3
Foul and Defective Rain Water Cisterns	7
Filthy Urinals, Closets and Passages	3
Filthy Houses	23
Escapes of Sewer Gas into :	
External Closets	31
Living Rooms and Sculleries	1
Yards, from defective Drains, badly set Gullies, or Rain Water Pipes connected direct with the Sewers or Drains	57
	194

STATEMENT E.

In connection with the Inspection of Factories and Workshops, the following Sanitary defects have been found, and Formal and Informal Notices served.

	No. of Orders.
To abolish Manure and Ash-pits	3
,, provide Ash-tubs or Bins	6
,, erect New Water Closets	2
,, fix Closet Basins and Syphons	3
,, repair Flushing Apparatus and lay on Water Supply	1
,, alter and ventilate Soil Pipes	3
,, relay or repair defective Drains	2
,, clear choked Drains	7
,, fix Traps or Gully Gratings	6
,, erect, alter, screen, or repair Urinals	5
,, provide new, or relay or repair Floors	5
,, repair Roofs	7
,, cleanse and limewash Workshops	49
,, repair Walls	4
,, fix 4-inch Ventilating Pipes	2
,, provide Light and Ventilation	2
Total	107

STATEMENT F.

Showing the number of Offensive Trades carried on, and Registered and Licensed Premises within the Borough requiring the constant attention of the Inspectors.

Description of Trade.	No.
Slaughter Houses (Registered)	72
„ „ (Public)	18
Tripe Houses	32
Common Lodging Houses	31
Bakehouses	251
Cowsheds	50
Milk Shops and Dairies	759
Tallow Melters	1
Chemical Works	2
Tanners and Fellmongers	2
Bone Boilers	1
Knacker's Yard	1
Gut Scrapers	2

STATEMENT G.

Showing the quantity of Meat, etc., condemned by the Inspectors of Foods during the year 1908.

MEAT, ETC., CONDEMNED AND DESTROYED.

	Tons.	Cwts.	Qrs.	Lbs.
Meat	38	12	1	23
Fish	44	8	1	21
Fruit	1	11	0	10
Vegetables	2	18	2	11

Rabbits	4279
Preserved Foods	3878
Poultry	183
Eggs	568
Hares	17
Grouse	64

APPENDIX V.

REPORT

OF THE

INSPECTORS OF FOOD.

MESSRS. MARTIN TYLDESLEY & FRED. SOWERBUTTS.

During the year 1908 visits of inspection have been made to the following: Wholesale fish, fruit, and vegetable market (daily); retail fish market (daily, Mondays excepted); general markets (Wednesday and Saturday); meat market (Saturday); cattle markets (fat and store stock); Corporation and private slaughter houses; butchers', fishmongers', fruiterers', and greengrocers' shops; hawkers' carts and barrows; pork pie manufactories; restaurants; tripe auction; tripe boilers' premises; jam manufactories; cold air stores (Corporation and private); gut scrapers' premises; knackers' yards; and cowsheds.

The amount of food voluntarily surrendered or seized was:—

	Tons.	Cwts.	Qrs.	Lbs.
Meat	38	12	1	23
Fish	44	8	1	21
Fruit	1	11	0	10
Vegetables	2	18	2	11
Rabbits			4,279	
Preserved Foods (tins and jars)			3,878	
Poultry			183	
Eggs			568	
Grouse			64	
Hares			17	

In our last report we made reference to the existence of tuberculosis in cattle bought in good faith for slaughter, the inability of a butcher to discover from superficial examination the presence of the disease, and the consequent destruction of the carcase or portion of the carcase. We also mentioned the fact that there was a Butchers' Association in Leicester which gave compensation to its members who were so unfortunate as to lose meat from this cause. Since making that report the National Federation of Meat Traders have demanded a warranty with all fat stock bought for slaughter, which the agriculturists refused to give. Owing to this action, during the year under notice, an Insurance Company has undertaken for a small premium (1s. to 2s. 6d.) to insure cattle against loss from tuberculosis and all other diseases, and from bruising. This has entailed extra work for us, as formerly butchers who had livers or small offals diseased threw them away without calling our attention to them, as it was obvious they were unfit for human food. As the Insurance Company will not pay compensation unless a surrender note is produced, all such offals have now to be seen by the Inspector.

The number of carcases and portions of carcases condemned during the year for tuberculosis was :—

Cattle	43 Carcases. 6 Forequarters.
Pigs	28 Carcases. 2 Hindquarters.

The number of cowsheds in the Borough is 50, and the number of cows housed therein 512. The sheds were visited frequently during the period the cows were tied up and the cows examined. All the cows were in an apparently healthy condition. Two sheds have been reconstructed during the year and repairs done to others.

During the year there was a prosecution for exposing for sale unsound food, and a conviction recorded. One person was cautioned by the Committee for having sold unsound food, and two persons were cautioned for establishing tripe boiling businesses without consent.

MARTIN TYLDESLEY,
FREDERICK SOWERBUTTS,

Inspectors of Food.

APPENDIX VI.

REFUSE DISPOSAL DEPARTMENT.

REPORT OF THE SUPERINTENDENT, MR. J. L. FREER.

I beg to submit the following particulars of work done in the Refuse Disposal Department during the past year.

Population of Borough ..	240,172
Area (in acres)	8,586
Miles of Streets	184½

The *House Refuse* of the Borough is all collected by Corporation workmen with the exception of one small district (Knighton) which is still scavenged by contract. Almost all houses are now provided with the portable covered galvanised iron bins, of which there are 52,183. The Borough is divided into sixteen districts. The men work in gangs of six, with two horses and carts to each gang. Each gang is able to collect fifty-one loads per week, and the average earnings are 26s. per week for collectors and 27s. for drivers. The latter have to attend to their horses, whilst the collectors wash the carts and clean the harness. Drivers required for Sunday stable duty are granted an extra shilling.

The *Ash-pit Refuse* is collected as follows: The town is divided into five districts. There are five gangs, with two horses and carts to each gang. The men are paid 5d. per ton of refuse collected, and their average earnings are: Collectors 27s. per week; drivers 29s. per week. The latter get *the extra 2s.* for attending to their horses.

The following plant is in use: 64 carts, 47 railway wagons, 3 slop carts, 2 canal boats, and 1 tip wagon.

The number of men employed is as follows:

Portable Ash-bin Men	82
Ash-pit Men	20
Foremen	2
Wagoners	4
Wharf Men	8
"Tip" Men (at Destructors)	3
Old Men, sorting refuse	3
Total	122

The number of horses required is forty-five.

Portable Ash-bins collected weekly	52,183
Portable Ash-bins collected twice a week	520
Ash-pits emptied every 8 or 10 weeks	1,478
Manure Pits emptied at short intervals	238
Trade refuse, number of places where collected weekly	72

AMOUNT OF REFUSE COLLECTED IN 1908.

	TONS.
From Portable Ash-bins ..	34,961
From Ash-pits	6,346
From Knighton District (House Refuse)	2,204
Trade Refuse	1,677
	45,188

Of this quantity, 946 tons were used to mix with manure; the remainder was burnt at the destructors.

The amount of Stable Manure collected was 8,524 cart loads.

The Sales during 1908 were as follows:—

				£	s.	d.
Manure,	669 railway wagon loads,	weight	4,953 tons	652	2	0
,,	9 boat loads	weight	369 tons	56	14	0
,,	70 cart loads	weight	70 tons	7	11	0
Night-soil,	8 wagon loads,	weight	12 tons	8	8	0
	Total		5,395	£724	15	0

3,554 loads of Trade Refuse (weight 1,677 tons) were removed and taken to the destructor, the payments received amounting to £444 5s. 0d.

[NOTE.—A charge of 2s. 6d. per load is made for collecting and burning trade refuse, or 2s. per ton for burning only.]

"TATTING."

The saleable articles picked out of the House Refuse are sold and one-half of the proceeds is divided amongst the Ash-bin men and the Destructor Firemen, the other half being retained by the Corporation. The amount received by the men averages 6s. per head per quarter.

HOSPITAL SATURDAY SOCIETY.

All workers in this department subscribe 1d. weekly, the total amount realised last year being £26.

AMOUNT OF REFUSE RECEIVED AT THE DESTRUCTORS IN 1908.

	Tons.
Nedham Street	11,283
Mill Lane	12,802
The Lero	12,892
West Humberstone	9,707
Total	46,684

2,095 dilapidated dust-bins were reported. These are renewed by the landlord.

J. L. FREER,
Superintendent.

APPENDIX VII.

STREET CLEANSING DEPARTMENT.

REPORT OF THE SUPERINTENDENT, MR. H. F. WIGFIELD.

My Report on the Cleansing of the Borough for the year 1908 is as follows :—

STREET CLEANSING

The particulars of the streets swept are as follows : viz.,

	Hand Swept.	Machine Swept.
Once per week	45 miles	14 miles.
Twice ,,	16 miles	12 miles.
Three times per week	4 miles	6 miles.
Four ,, ,,	1,600 yards only	2 miles.
Five ,, ,,	None	713 yards only.
Six ,, ,,	727 yards	10 miles.

About ten miles of the main streets are also hand-swept on Sundays.

The total length of roadway swept is about 115 miles.

The number of gullies emptied during the year was 108,876.

Loads of sweepings collected : Dry, 6,438 ; Sludge, 5,089 ; Total, 11,527.

The number of persons regularly employed in the Department is the same as last year, viz., 123.

The conditions of labour and the rates of pay are the same as those in vogue last year, viz., 27s. per week of 54 hours on day work, and 48 hours on night work.

SANDING AND GRAVELLING.

The number of loads of sand and gravel spread last year was 1,415, compared with 1,526 in 1907. More rough gravel was spread on the granite paved streets than in the previous year, but the saving of 111 loads was due to the wood paved streets in the centre of the town being swilled each night during the Summer and thus obviating the necessity for gravelling.

SNOW REMOVAL.

The total loads of snow removed last year was 2,204, as compared with 1,786 loads in the previous year, the total cost in excess of our regular staff being £262 4s. 6d. Of this amount £105 0s. 8d. was paid to "Casuals."

STREET WATERING.

There were thirteen hired horses engaged on street watering during the Summer in addition to four men and horses belonging to the Department.

The distance watered by carts daily was about 82 miles.

The following watering was done by arrangement with the Tramways Department :—

1908.	Loads Spread.	Quantity in Gallons.	£	s.	d.
April ...	100	180,000	10	0	0
May ...	352	633,600	35	4	0
June ...	183	869,400	48	6	0
July ...	475	855,000	47	10	0
August ...	404	727,200	40	8	0
September ...	134	241,200	13	8	0
October ...	8	14,400		16	0
	1,956	3,520,800	195	12	0
Previous year	1,861	3,349,800	186	2	0

The new electric watering tank which is being provided by the Tramways Committee has been completed, and will enable us during the coming season to dispense with four hired carters and horses.

ANNUAL STATEMENT OF RECEIPTS FROM CONVENIENCES.

Conveniences.	Amount received.	Amount received previous year.
Horsefair Street (Ladies)	115 18 4	111 6 8
Belgrave Gate (Ladies)	3 1 10	2 14 8
Belgrave Gate (Gents.)	7 1 2	8 1 5
Town Hall Square	8 15 7	9 0 10
Humberstone Gate	99 0 9	90 6 5
Waterloo Street	3 1 1	3 9 5
Haymarket	5 13 3	5 6 4
Northampton Square	4 19 3	5 6 7
Russell Square	2 3 9	2 11 2
	£249 15 0	£238 3 6

The number of Urinals and Lavatories in the town remains as last year, viz., 44.

We have also eight drinking troughs as before.

ROLLING STOCK.

The list of vehicles used in the Department is as follows:—Street sweeping carts, 18; sludge carts, 24; market cart, 1; orderly bin cart, 1; gravel carts, 5; watering carts and vans, 24; orderly trucks, 9; gravel trucks, 2; snow ploughs, 9; snow scrapers, 5; horse brushes, 15; dray, 1; a total of 114 vehicles.

The whole of the above vehicles have been overhauled and repaired during the year.

The total loads of material handled were as follows:—

Sweepings collected (dry)	6,438
,, ,, (sludge)	5,089
Horse Manure collected (orderly boxes)	915
Market Refuse	1,084
Horse Manure, recarted to gardens	510
Sweepings ,, ,,	499
Loads of Snow removed	2,204
Loads of Gravel Spread	1,415
Loads of Water spread (our carts)	24,669
Miscellaneous	400
Stable Refuse to Jarvis Street	312
	43,535

The total number of loads handled in 1907 was 36,940.

H. F. WIGFIELD,

Cleansing Superintendent.

APPENDIX VIII.

STATISTICAL TABLES.

MUNICIPAL WARDS. TABLE I.

AREA, NUMBER OF INHABITED HOUSES AND POPULATION.

WARD.	Area in Acres.	No. of Inhabited Houses Census 1901.	No. of Inhabited Houses July, 1908.	Increase in Inhabited Houses during 7 years.	Decrease in Inhabited Houses during 7 years.	No. of Persons per House Census 1901.	Population Census 1901.	Estimated Population, 1908.
1. St. Martin's	81	808	625	...	183	4·69	3791	2931
2. Newton	153	2442	2137	...	305	4·23	10330	9039
3. St. Margaret's	274	2789	2993	204	...	4·53	12639	13558
4. Wyggeston	111	3594	3224	...	370	4·42	15890	14250
5. Latimer	250	3569	3506	...	63	4·84	17275	16969
6. Charnwood	116	1988	1956	...	32	4·56	9084	8919
7. Wycliffe	147	2760	2622	...	138	4·27	11810	11196
8. De Montfort	350	1764	1621	...	143	4·48	7907	7262
9 The Castle	370	3178	3079	..	99	4·52	14384	13917
10. Westcotes	801	3713	5168	1455	...	4·51	16752	23308
11. The Abbey	891	3756	4139	383	...	4·82	18116	19950
12. Belgrave	1013	3046	3519	473	...	4·54	13849	15976
13. West Humberstone	887	3336	3788	452	...	4·71	15717	17841
14. Spinney Hill	702	4535	5245	710	...	4·69	21279	24599
15. Knighton	910	2236	3228	992	...	4·57	10221	14752
16. Aylestone	1530	2033	2324	291	...	4·84	9860	11248

MUNICIPAL WARDS. TABLE II.

ZYMOTIC-RATES, DIARRHŒA-RATES AND PHTHISIS-RATES IN 1908.

WARD.	Zymotic-rate, exclusive of Diarrhœa.	Diarrhœa-rate.	Phthisis-rate.
1. St. Martin's	1·3	·3	1·3
2. Newton	3·8	1·1	1·8
3. St. Margaret's	2·7	1·4	1·4
4. Wyggeston	1·9	1·4	2·1
5. Latimer	2·2	·8	1·4
6. Charnwood	1·1	·4	1·2
7. Wycliffe	·4	·1	1·7
8. De Montfort	·4	·0	·4
9. The Castle	·5	·4	1·3
10. Westcotes	·5	·2	·7
11. The Abbey	1·0	·3	1·6
12. Belgrave	1·4	·6	1·1
13. West Humberstone	·8	·5	·7
14. Spinney Hill	·2	·2	·8
15. Knighton	·1	0	·5
16. Aylestone	·4	·5	1·7

N.B. The deaths occurring in the Leicester Infirmary have been distributed to their respective wards. Those occurring in the Workhouse and in the Borough Asylum, have had to be excluded, as the addresses of the patients are not obtainable. In the case of Wards 7 and 13 a deduction has been made from the population on account of the inmates of the Workhouse and Asylum respectively.

The Union Infirmary is just outside the Borough, and the deaths there are distributed to their respective wards, with the exception of the deaths of persons transferred to the Infirmary from the Workhouse. These have been treated in the same way as the Workhouse deaths.

TABLE III.

Births, Deaths, and Deaths under 1 year in each Municipal Ward in 1908 and previous years.

Name of Ward.	1902		1903		1904		1905			1906			1907			1908		
	Total Deaths	Deaths under 1 year	Total Deaths	Deaths under 1 year	Total Deaths	Deaths under 1 year	Total Births	Total Deaths	Deaths under 1 year	Total Births	Total Deaths	Deaths under 1 year	Total Births.	Total Deaths	Deaths under 1 year	Total Births	Total Deaths	Deaths under 1 year
1. St. Martin's	47	13	41	10	53	13	55	47	9	55	70	13	57	45	11	54	51	12
2. Newton	192	85	202	87	219	91	305	205	80	321	238	83	287	150	40	478	188	55
3. St. Margaret's	188	82	198	79	210	74	387	202	66	417	210	72	372	215	68	357	238	64
4. Wyggeston	278	119	236	101	240	101	500	236	100	490	243	109	404	282	94	456	278	100
5. Latimer	293	104	244	91	266	84	495	233	75	515	264	80	478	267	80	480	265	73
6. Charnwood	107	30	133	31	124	30	194	111	22	210	153	35	181	108	27	187	100	23
7. Wycliffe	172	50	157	58	138	62	302	167	18	223	261	56	197	162	28	190	276	29
8. De Montfort	93	14	85	12	94	9	100	92	9	100	112	15	93	89	14	84	105	15
9. The Castle	185	58	172	49	191	55	370	170	47	316	213	63	349	185	43	314	207	41
10. Westcotes	192	54	202	63	218	58	483	225	56	508	255	61	534	190	14	485	174	52
11. The Abbey	250	120	235	111	262	102	584	237	86	591	292	84	531	264	73	487	245	67
12. Belgrave	194	65	175	72	207	81	478	199	72	502	220	84	154	212	47	451	206	54
13. West Humberstone ...	174	64	180	61	176	59	514	212	60	518	159	64	496	187	47	484	269	58
14. Spinney Hill	276	77	243	45	257	48	547	230	42	550	264	63	507	240	59	541	266	47
15. Knighton	95	22	101	27	112	29	258	99	24	261	129	22	280	99	16	284	135	17
16. Aylestone	137	44	142	82	143	78	316	145	67	288	174	71	261	111	28	274	116	30

N.B.—In order to make a fair comparison, all the deaths at the Borough Asylum and Union Workhouse have been subtracted, but not distributed.

The Poor Law Infirmary at North Evington is just outside the Borough Boundary. The deaths occurring there have been distributed in their respective Wards with the exception of those transferred to the Infirmary from the Workhouse; these have been dealt with in same way as Workhouse deaths.

TABLE IV.

Vital Statistics in each Municipal Ward in 1908 and previous three years.

Name of Ward.	1905			1906			1907			1908.		
	Death Rate.	Birth Rate.	Infant Mortality.	Death Rate.	Birth Rate.	Infant Mortality.	Death Rate.	Birth Rate.	Infant Mortality.	Death Rate.	Birth Rate.	Infant Mortality.
1. St. Martin's	11·7	13·7	163 6	19·9	15·6	236·3	15·4	19 5	192·9	17·3	18·4	222
2. Newton	20 9	31·1	262·3	25·2	34·1	258·5	16·6	31 7	139·3	20·7	25·4	239
3. St. Margaret's ...	14·7	28·2	170·5	15·2	30·3	172·6	16·0	27·3	182·7	17·5	26·3	179
4. Wyggeston	15·6	33 1	200 0	16·4	33·1	222·4	19·7	28·2	232·6	19·5	32·0	219
5. Latimer	13·5	28·7	151·5	15 2	29 7	155·3	15 7	28·1	167·3	15·6	28·8	152
6. Charnwood	12·3	21 5	113·4	16·9	23·2	166·6	12·2	20·5	149·1	11·2	20·9	123
7. Wycliffe	15·5	25·8	158·9	23·8	19·4	251·1	16·1	17·7	142·1	16·0	18·8	143
8. De Montfort	11·7	12·8	90·0	14 7	13·2	150·0	12·2	12·7	150·5	14·4	11 5	179
9. The Castle	11·6	25 3	127 0	14·7	21·8	199·3	13·2	25·0	123·2	14·8	22 5	131
10. Westcotes	10·3	22·2	115·9	11·3	22·5	120·0	8·7	23 4	82 3	7·4	20·8	107
11. The Abbey	12·0	29·6	147·3	14·5	29 3	142·1	13·2	26·6	137·4	12 2	24·4	138
12. Belgrave	12·4	29·8	150·6	13·6	31·1	167·3	13·1	28·2	103·7	12 8	28·2	120
13. West Humberstone	8·4	29 0	116·7	12·8	28 9	123·5	7·6	27·9	94·7	12·8	28·2	120
14. Spinney Hill	9·6	22·9	76·8	10·9	22·7	114·5	9·8	20 7	116·3	10·8	21·9	87
15. Knighton	7·5	19·5	93·0	9·3	18·9	84·3	6 9	19 6	57·1	9·2	19·3	60
16. Aylestone	13·1	28·7	212·0	15 6	25·6	246·5	9 9	23·3	107·6	10·3	21·3	109
Whole Borough ...	13·4	25·8	146·5	14·39	25·26	166·2	12·65	23·43	130·1	12·98	23·64	129·7

NOTE.—The population has been calculated from the number of inhabited houses in each ward.

Wycliffe Ward contains the Union Workhouse, and West Humberstone Ward the Borough Asylum. It is not possible to distribute the deaths in these institutions to their respective wards, but they have been subtracted from the wards in question in order to enable a fair comparison to be made. The population of these institutions (Workhouse—1100; Asylum—700) has also been subtracted.

The Union Infirmary is just outside the Borough Boundary. The deaths occurring there have been distributed to their respective wards, with the exception of the deaths of persons who had been transferred to the Infirmary from the Workhouse. These have been treated in the same way as Workhouse deaths.

The Maternity Hospital, Causeway Lane, is in Newton Ward. The 248 births which occurred there have been subtracted, but not distributed.

TABLE V.

Deaths in each Ward from the chief Zymotic Diseases in 1908.

Name and Number of Ward.	Small Pox.	Whooping Cough.	Measles.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Diarrhœa.	Totals.
1. St. Martin's	...	...	4	...	...	...	1	5
2. Newton	...	3	27	2	3	...	10	45
3. St. Margaret's	...	2	28	4	...	2	19	55
4. Wyggeston	...	3	21	4	...	...	20	48
5. Latimer	...	3	30	4	1	...	14	52
6. Charnwood	...	...	8	...	...	1	4	13
7. Wycliffe	...	...	2	2	...	1	2	7
8. De Montfort	...	2	1	...	...	...	...	3
9. Castle	...	...	6	...	...	1	6	13
10. Westcotes	...	...	2	5	...	...	5	12
11. The Abbey	...	4	12	4	1	...	7	28
12. Belgrave	...	8	13	...	1	1	11	34
13. West Humberstone ...	...	3	7	2	1	1	9	23
14. Spinney Hill	...	2	2	1	...	1	5	11
15. Knighton	...	...	2	...	...	...	1	3
16. Aylestone	...	...	2	1	2	...	6	11
Whole Borough	...	30	167	29	9	8	120	363

Deaths at the Borough Isolation Hospital have been distributed to their respective wards.

TABLE VI.

Vital Statistics of 33 Great Towns of over 100,000 Population (arranged in Alphabetical Order).

(From figures supplied in advance by the Registrar General.) For the year 1908. *

TOWNS.	Death-rate for 10 years, 1898-1907†	Estimated Population, 1908.	Death-rate (corrected for Institutions only).	Birth-rate.	Deaths under one year per 1000 Births.	Death-rates per 1000 persons living from :—							
						Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa.	Principal Epidemic Diseases.
London	16·7	4,795,757	13·8	25·2	113	0·31	0·11	0·15	0·20	0·05	0·53	1·35
Birkenhead	17·7	119,830	15·8	31·4	136	0·35	0·06	0·11	0·50	0·09	0·76	1·86
Birmingham	18·9	558,357	15·9	28·4	114	0·11	0·13	0·19	0·51	0·09	0·80	1·86
Blackburn	18·0	135,961	15·7	25·0	149	0·13	0·17	0·09	0·21	0·11	0·85	1·56
Bolton	17·5	185,358	15·4	24·5	118	0·02	0·11	0·10	0·42	0·20	0·85	1·70
Bradford	16·8	292·136	15·5	20·2	143	0·24	0·04	0·14	0·19	0·10	0·65	1·36
Brighton	16·0	129,967	14·7	21·3	101	0·17	0·01	0·07	0·14	0·03	0·22	0·65
Bristol	15·8	372,785	13·6	23·1	126	0·26	0·03	0·17	0·34	0·02	0·34	1·16
Burnley	19·3	105,100	17·9	28·2	200	0·18	0·12	0·12	0·38	0·11	1·59	2·80
Cardiff	15·6	191,446	13·0	28·6	125	0·03	0·05	0·11	0·21	0·04	0·63	1·10
Croydon	13·4	157,698	12·8	25·1	99	0·58	0·01	0·21	0·17	0·03	0·31	1·37
Derby	15·4	127,583	13·1	25·9	112	0·15	0·02	0·28	0·12	0·04	0·31	0·95
Gateshead	18·1	128,393	14·9	30·9	118	0·13	0·04	0·20	0·52	0·03	0·98	1·90
Halifax	16·2	111,018	14·1	19·0	101	0·33	0·03	0·11	0·27	0·11	0·16	1·01

Hull	17·9	271,137	16·2	30·2	145	0·35	0·01	0·18	0·21	0·08	1·36	2·19
Leeds	17.7	477,107	15·3	24·8	137	0·37	0·03	0·09	0·28	0·05	0·67	1·49
Leicester *	**15·4**	**240,172**	**13·0**	**23·4**	**131**	**0·73**	**0·11**	**0·03**	**0·13**	**0·03**	**0·50**	**1·53**
Liverpool	21·9	753,203	19·2	31·7	141	1·34	0·28	0·17	0·15	0·11	0·84	2·19
Manchester	21·0	649,251	18·2	29·1	151	0·56	0·15	0·18	0·33	0·11	0·92	2·25
Newcastle-on-Tyne ...	19·7	277,257	16 0	29·7	136	0·11	0·04	0·12	0·48	0·05	0·46	1·26
Norwich	17·3	122,841	14·1	25·2	116	0·01	0·02	0·21	0·20	0·29	0·39	1·12
Nottingham	17·8	260,449	15·2	26·6	145	0·12	0·04	0·11	0·23	0·11	0·64	1 25
Oldham	19·6	142,507	19·8	28·0	159	0·57	0·19	0·15	0·37	0·08	1·14	2·50
Portsmouth	16·9	211,493	13·8	28·4	99	0·06	0·04	0·23	0·26	0·12	0·26	0·97
Plymouth	17·8	122,113	15·0	22·2	129	0·01	0·00	0·12	0·22	0·08	0·48	0·91
Preston	20·4	117,799	18·0	27·7	153	0·79	0·01	0·09	0·16	0·22	0·97	2·24
Salford	20·6	239,294	17·8	29·6	152	0·69	0·27	0 51	0·42	0 17	0·98	3·04
Sheffield	18·7	463,222	15·8	30·7	140	0·23	0·08	0·08	0·53	0·06	0·87	1·85
Southampton	15·4	122,196	12·9	23·9	113	0·16	0·04	0 13	0·28	0·04	0·53	1·17
South Shields	18·9	115,535	15·5	30 1	134	0 27	0·08	0·20	0·43	0·06	0·65	1·69
Sunderland	20·3	157,693	17·7	33 0	146	0·16	0·04	0·17	0·74	0·09	0·66	1·86
West Ham	16·9	315,000	13·9	28·8	128	0·71	0·16	0 17	0·26	0·09	1·00	2 39
Wolverhampton	17·3	103,318	14·3	25·8	132	0·06	0·09	0·30	0·23	0·10	0·44	1·22

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* The Figures are for the 53 weeks ending January 2nd, 1909, and do not exactly tally with the figures given elsewhere in the Report, which are for the year ending December 31st, 1908.

† The Rates are corrected for institutional deaths only—not for age and sex.

TABLE VII.

Showing mean Weekly Temperature of Earth at Depth of 1 ft. and 4 ft. for the Year 1908.

Week ending.	1 foot.	4 feet.	Number of Deaths per week from Diarrhœa.
May 16	51·0	49·0	...
,, 23	55·5	50·2	...
,, 30	56·5	51·7	...
June 6	59·7	53·7	...
,, 13	58·7	55·0	1
,, 20	57·2	55·0	...
, 27	59·0	55·2	...
July 4	62·2	57·2	1
,, 11	61·0	58·5	1
,, 18	59·9	58·2	2
,, 25	59·2	57·7	...
Aug. 1	63·0	60·5	1
,, 8	63·5	60·7	10
,, 15	61·5	59·7	12
,, 22	58·7	58·7	11
,, 29	59·2	58·0	13
Sept. 5	54·5	57·2	11
,, 12	54·0	57·0	3
,, 19	54·0	56·5	6
,, 26	54·0	56·0	2
Oct. 3	54·0	55·7	10
,, 10	53·0	55·0	4
,, 17	53·0	55·0	7
,, 24	51·7	54·7	5
,, 31	51·5	54·5	4

TABLE VIII.

Weekly Deaths from Diarrhœa from 1897–1908.

Week of the Year.	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
25th ..	0	1	1	3	1	2	0	0	0	1	0	0
26th ..	0	2	5	2	1	3	1	1	0	0	2	0
27th ..	1	1	1	4	1	2	0	1	1	1	2	1
28th ..	10	4	3	4	2	1	0	2	3	1	2	1
29th ..	7	4	4	12	4	1	3	5	3	1	0	2
30th ..	13	14	11	21	15	2	1	8	15	2	0	0
31st ..	21	18	24	16	17	0	9	21	18	3	1	1
32nd ..	41	32	25	25	17	0	9	30	33	10	0	10
33rd ..	53	28	31	27	24	2	9	43	24	18	1	12
34th ..	60	35	46	38	22	2	12	31	25	32	1	11
35th ..	48	48	36	38	27	3	15	30	25	35	2	13
36th ..	37	31	42	24	29	4	8	24	18	46	4	11
37th ..	28	32	17	12	16	6	10	24	15	28	2	3
38th ..	15	24	7	18	6	10	8	13	9	30	7	6
39th ..	7	10	3	11	8	19	6	8	3	11	9	2
40th ..	2	13	2	7	10	16	6	7	1	6	13	10
41st ..	3	4	3	4	5	19	2	3	1	8	10	4
42nd ..	0	3	3	2	2	10	1	6	3	1	3	7
43rd ..	1	3	1	3	2	8	2	4	1	4	4	5
44th ..	0	6	0	1	1	5	0	2	0	1	1	4

TABLE IX.

LEICESTER BOROUGH.

Showing estimated Population, Marriage-rates, Birth-rates, and Death-rates (General and Zymotic) per 1000 living during the last 64 years, 1845-1908.

Year.	Estimated Population.	Marriage Rate.	Birth Rate.	Death Rate.	Zymotic (Death) Rate.
1845	54,737	24·04	40·14	30·85	9·07
1846	55,707	21·00	39·72	29·48	8·11
1847	56,696	18·80	35·36	25·69	4·12
1848	57,705	20·86	34·71	25·77	5·87
1849	58,736	21·58	36·96	28·73	7·05
1850	59,788	24·04	37·45	23·64	4·13
1851	60,760	21·11	40·11	25·57	5·48
1852	61,467	22·96	38·83	28·84	8·42
1853	62,181	22·90	36·71	27·02	5·45
1854	62,903	20·40	39·06	25·11	6·65
1855	63,624	19·14	36·16	23·55	2·87
1856	64,366	20·02	37·32	21·16	3·10
1857	65,119	20·60	37·48	27·58	8·19
1858	65,835	19·14	34·54	28·76	8·07
1859	66,663	22·56	37·77	24·59	4·99
1860	67,456	19·80	38·05	20·47	1·27
1861	68,638	18·58	37·01	25·25	5·71
1862	70,986	21·30	38·37	23·38	3·01
1863	73,413	25·74	40·00	29·95	7·96
1864	75,922	25·68	41·01	26·96	5·41
1865	78,516	25·38	41·09	25·02	5·20
1866	81,197	24·94	42·02	23·33	3·37
1867	83,970	22·18	41·66	24·59	4·31
1868	86,837	22·62	41·32	28·15	7·88
1869	89,804	21·12	41·87	25·60	5·10
1870	92,873	21·22	40·90	27·33	7·24
1871	95,823	23·06	41·55	26·07	5·83
1872	98,251	23·90	42·36	26·95	8·23
1873	100,741	24·00	44·14	23·83	5·05
1874	103,294	20·90	42·34	24·29	3·83
1875	105,913	22·36	40·31	27·28	6·56
1876	108,599	22·64	44·02	23·58	5·26
1877	111,355	21·24	42·68	23·48	3·21
1878	114,182	19·38	41·85	21·89	4·18
1879	117,083	19·48	40·11	22·64	3·06
1880	120,059	19·60	40·04	24·73	6·48
1881	123,146	18·66	38·26	21·55	4·45
1882	126,275	19·02	38·46	20·04	3·23

TABLE IX.—Continued.

Year.	Estimated Population.	Marriage Rate.	Birth Rate.	Death Rate.	Zymotic (Death) Rate.
1883	129,483	18·64	37·26	19·18	2·56
1884	132,773	17·34	36·53	22·12	4·20
1885	136,147	16·36	34·39	19·39	3·32
1886	139,606	17·46	34·80	19·62	2·81
1887	143,153	16·60	32·79	19·10	3·05
1888	146,790	15·48	32·79	18·16	2·45
1889	150,520	16·08	31·82	16·63	2·30
1890	154,344	16·52	30·44	17·79	2·18
1891*	177,353†	19·16	33·58	21·22	3·39
1892‡	180,550	16·71	32·21	18·00	2·57
1893	183,900	15·85	32·65	19·72	3·56
1894	187,250	16·70	32·01	14·57	1·93
1895	190,600	16·41	31·28	17·41	3·01
1896	194,100	17·52	32·00	16·88	2·98
1897	197,600	16·78	31·63	17·98	1·97
1898	201,250	17·78	30·56	17·29	3·41
1899	204,900	17·58	30·61	18·18	3·41
1900	208,600	17·30	29·75	17·87	3·60
1901	212,498	17·17	29·03	15·71	2·34
1902	216,389	16·19	29·17	14·65	1·54
1903	220,272	16·20	27·31	13·91	1·53
1904	224,186	16·46	26·67	14·56	1·95
1905	228,132	16·53	25·81	13·42	1·64
1906	232,111	15·32	25·28	14·39	2·33
1907	236,124	15·64	23·43	12·65	·90
1908	240,172	14·88	23·64	12·98	1·51

N.B.—The above figures, prior to the year 1890, are those supplied by Mr. J. T. Biggs to the Royal Commission on Vaccination, and are taken from the Commission's 4th Report.

* All figures after 1891 refer to extended Borough.

† This is the Population of the extended Borough. The figures in the other columns for same year refer to the old Borough.

‡ The figures for the nine years, 1892—1900, have been revised on the basis of the 1901 Census.

TABLE X.

Number of Deaths from certain specified causes in 1908 and previous years.

	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Zymotic Diseases (except Diarrhœa)	291	389	432	519	297	222	205	177	171	291	146	250
Diarrhœa	360	323	292	286	224	137	133	289	211	258	73	120
Enteritis	112	86	109	90	78	42	52	35	32	25	58	63
Cancer	153	116	139	140	161	171	192	213	180	168	199	214
Phthisis	215	221	202	230	271	272	266	353	288	339	275	287
Apoplexy and Paralysis	179	164	187	164	182	207	179	201	165	185	150	169
Convulsions	185	170	151	134	159	120	117	107	89	98	85	103
Heart Disease	266	271	294	305	290	343	322	301	313	322	369	312
Bronchitis and Pneumonia ...	535	553	565	623	494	480	421	405	397	422	461	422
Premature Birth	151	131	143	135	130	151	154	111	147	156	133	113
Atrophy and Debility	202	166	209	187	204	191	168	187	173	160	119	121
Old Age	160	189	224	211	198	214	218	240	247	207	242	205
Violence	96	67	115	109	110	110	88	87	84	96	85	88
Ill-defined and not specified causes	36	19	23	38	42	53	45	49	48	85	31	61

TABLE XI.

Showing the number of Notification Certificates for the principal Zymotic Diseases for the fourteen years, 1895-1908.

Disease.	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Small Pox ...	4	0	0	0	0	0	4	9	406	321	5	1	0	0
Scarlet Fever ..	723	2110	1645	923	1247	839	758	826	533	554	1117	2301	1710	1206
Diphtheria ...	75	170	229	218	892	1452	1034	320	211	97	173	315	178	123
Enteric Fever ...	248	283	215	237	162	117	126	81	58	64	68	67	47	43
Erysipelas	202	264	218	230	341	306	181	225	214	239	253	158	166	162
Puerperal Fever ...	10	18	20	11	18	26	12	15	11	16	20	10	10	12
*Phthisis	...	...	...	...	...	...	...	...	156	182	225	215	212	197
Totals	1262	2845	2327	1619	2660	2740	2115	1476	1389	1473	1861	3067	2323	1743

* Voluntary notification only.

TABLE XII.

Showing the Number of Deaths from Zymotic Diseases in the Thirteen Years 1896–1908.

DISEASE.	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Small Pox	0	0	0	0	0	0	5	21	4	0	0	0	0
Measles	120	12	211	31	49	17	73	74	32	53	80	60	167
Scarlet Fever.. ..	48	73	44	42	28	6	11	15	4	36	52	44	29
Diphtheria	53	73	63	222	316	155	29	28	6	11	27	17	9
Whooping Cough ..	47	82	19	84	46	77	67	36	89	50	112	14	30
Enteric Fever ..	40	38	27	28	26	20	12	13	14	9	14	5	8
Diarrhœa	272	360	323	292	286	224	137	133	289	211	258	73	120
Erysipelas	10	6	9	13	5	5	6	9	6	3	2	4	5
Influenza	9	0	14	6	41	13	14	6	17	2	0	17	15
Puerperal Fever ..	4	7	2	6	8	4	5	3	5	7	4	2	2
TOTALS ..	603	651	712	724	805	521	359	338	466	382	549	236	385

TABLE XIII.

Showing the Number of Inhabited Houses, Marriages, Births, Deaths, Zymotic Deaths, and Deaths in Public Institutions.

Year.	No. of Inhabited Houses.	Marriages.	Registered Births.	Corrected Number of Deaths.				Deaths in Public Institutions.	Deaths from Seven Principal Zymotic Diseases.
				Total all Ages.	Under One Year.	Under Five Years.	Over 60 Years.		
1893	37,895	1458	6006	3627	1324	1768	746	450	726
1894	38,818	1564	5995	2730	971	1301	564	383	363
1895	39,438	1564	5962	3320	1232	1611	774	406	573
1896	40,349	1701	6212	3277	1154	1624	689	441	580
1897	41,519	1658	6252	3553	1288	1758	746	340	645
1898	44,472	1789	6152	3480	1183	1703	773	406	687
1899	44,585	1801	6273	3727	1230	1707	897	543	699
1900	44,884	1805	6207	3729	1083	1627	863	583	751
1901	45,547	1825	6169	3338	1098	1435	827	553	499
1902	47,712	1752	6313	3172	981	1303	828	473	334
1903	48,348	1785	6018	3065	971	1279	954	583	320
1904	49,043	1845	5981	3266	964	1255	897	601	438
1905	49,348	1886	5888	3062	863	1148	897	685	370
1906	49,492	1778	5865	3341	975	1397	871	667	543
1907	48,825	1847	5534	2988	720	989	927	660	213
1908	49,174	1788	5680	3119	737	1109	952	507	363

NOTE.—In 1891 (Census year) the Borough was extended.
No. of Inhabited Houses of old Borough was 29,288 : of new Borough, 35,795.

TABLE XIV.

Showing the Annual Death-rates of Children, and proportion of Deaths in Public Institutions in a Thousand Deaths, for the past sixteen years.

In Year	Deaths of Children under one year per 1000 Births, = Infant Death-rate.	Deaths of Children under one year of age per 1000 of Total Deaths.	Deaths of Children under five years of age per 1000 of Total Deaths.	Deaths of Persons over sixty per 1000 of Total Deaths.	Deaths in Public Institutions per 1000 of Total Deaths.
1893	220·4	365·0	487·4	205·6	124·0
1894	161·9	355·6	476·5	206·5	140·2
1895	206·6	371·0	485·2	233·1	119·2
1896	185·7	352·1	495·5	301·8	134·5
1897	206·0	362·5	494·7	209·9	95·7
1898	191·1	311·2	489·3	222·1	116·6
1899	196·0	330·0	458·0	237·9	145·7
1900	174·4	290·4	436·3	231·4	156·3
1901	178·6	328·9	429·0	247·7	165·6
1902	153·3	327·0	410·7	261·0	145·3
1903	161·3	323·6	426·3	311·2	194·3
1904	161·1	298·2	384·2	274·6	184·0
1905	146·5	281·8	374·9	292·9	223·7
1906	166·2	296·8	418·1	266·7	199·6
1907	130·1	240·9	330·9	310·2	220·8
1908	129·7	236·2	355·5	305·2	162·5

TABLE XV.

Rates of Mortality of Children under one year of age from the chief Infantile Diseases, per 1000 Births.

DISEASE.	1903		1904		1905		1906		1907		1908	
	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.	Total Deaths.	Rate per 1000 Births.
From all causes	971	161·3	964	161·1	863	146·5	975	166·2	720	130·1	737	129·7
Atrophy and Debility	168	27·9	180	30·0	164	27·8	127	21·7	112	20·4	113	19·8
Diarrhœa	116	19·2	248	41·4	186	31·5	223	38·0	66	12·0	103	18·1
Convulsions...	103	17·1	87	14·5	79	13·4	79	13·5	72	13·1	86	15·1
Lung Diseases	152	25·2	91	15·2	94	15·9	113	19·3	125	22·8	88	15·4
Premature Birth	154	25·5	111	18·5	147	24·9	156	26·6	133	24·2	113	19·8
Tubercular Diseases	71	11·7	49	8·1	45	7·6	31	5·3	36	6·5	31	5·4
Measles	12	1·9	11	1·8	16	2·7	26	4·4	12	2·1	34	5·9
Whooping Cough	22	3·6	50	8·3	21	3·5	52	8·9	9	1·6	19	3·3

TABLE XVI.

Total Deaths, Death-rate, and Percentage of Deaths, from the eight principal groups of Diseases.

DISEASE.	1905.			1906.			1907.			1908.		
	Total Deaths.	Rate per 1000 Living.	Relative Percentage of Total Deaths.	Total Deaths.	Rate per 1000 Living.	Relative Percentage of Total Deaths.	Total Deaths.	Rate per 1000 Living.	Relative Percentage of Total Deaths.	Total Deaths.	Rate per 1000 Living.	Relative Percentage of Total Deaths.
Zymotic	398	1·7	12·9	569	2·5	17·03	253	1·07	8·4	407	1·7	13·0
Parasitic	1	·00	·02	1	·00	·02	0	·00	·00	0	·00	·00
Dietetic	9	·03	·2	9	·03	·2	7	·02	·2	4	·01	·1
Constitutional ...	630	2·7	20·5	646	2·8	19·3	612	2·5	20·4	665	2·7	21·3
Local	1306	5·7	42·6	1390	5·9	41·6	1476	6·2	49·3	1428	5·9	45·7
Developmental ...	586	2·5	19·1	545	2·3	16·3	524	2·2	17·5	466	1·9	14·9
Violence	84	·3	2·7	96	·4	2·9	85	·3	2·8	88	·3	2·8
Ill-defined	48	·2	1·5	85	·4	2·5	31	·1	1·0	61	·2	1·9

TABLE XVII.

ENTERIC FEVER.—Cases and Deaths in past years.

Year.	Population (in round numbers).	Cases Notified.	Deaths.	Cases per 1000 Pop.	Deaths per 1000 Pop.
1881	123,000	179	29	1·155	·235
1882	126,000	110	19	·873	·150
1883	129,000	85	10	·658	·117
1884	133,000	55	16	·413	·120
1885	136,000	216	36	1·588	·264
1886	140,000	141	19	1·007	·135
1887	143,000	222	31	1·552	·216
1888	147,000	266	32	1·809	·217
1889	151,000	147	22	·973	·145
1890	154,000	165	24	1·071	·155
1891	177,000	178	29	1·005	·163
1892	180,000	116	17	·644	·094
1893	184,000	392	47	2·130	·255
1894	187,000	215	27	1·149	·144
1895	191,000	248	38	1·298	·198
1896	194,000	283	40	1·458	·206
1897	198,000	215	38	1·085	·191
1898	201,000	237	27	1·179	·134
1899	205,000	162	28	·790	·136
1900	209 000	117	26	·359	·124
1901	212,000	126	20	·594	·091
1902	216,000	81	12	·374	·055
1903	220,000	58	13	·263	·059
1904	224 000	64	14	·285	·062
1905	228,000	68	9	·298	·039
1906	232,000	67	14	·288	·060
1907	236,000	47	5	·199	·021
1908	240,000	43	8	·179	·033

TABLE XVIII.

Occupations of Persons aged Ten Years and upwards in Leicester,

CENSUS 1901.

MALES.	Number of Persons Engaged.
Commercial or Clerks	2020
Conveyance of Men, Goods and Messengers ..	6684
Agriculture, on Farms, Woods and Gardens ..	895
Engineering and Machine Making	2893
Cycles, Coaches and other Vehicles	661
Building and Works of Construction	7006
Wood, Furniture, Fittings and Decorations ..	1441
Brick, Cement, Pottery and Glass	253
Paper, Prints, Books and Stationery	1603
Hosiery Manufacture	3282
Other Textile Manufactures	781
Tailors..	1129
Boot, Shoe, Slipper, Patten and Clog-makers ..	17770
Food, Tobacco, Drink and Lodging	5187
All other Occupations	14374
Total Occupied	65979
Retired or Unoccupied	10270
Total, Occupied or Unoccupied ..	76249

TABLE XVIII (a).

Occupations of Persons aged Ten Years and upwards in Leicester.

CENSUS 1901.

FEMALES.	No of Persons Engaged.		
	Unmarried.	Married or Widowed.	Total.
Midwives, Nurses, &c.	209	230	439
Teaching	989	36	1025
Art, Music, Drama, &c.	203	73	276
Domestic Service, Indoor	4535	364	4899
Charwomen, Laundry, &c.	519	1102	1621
Commercial, Clerks, &c.	491	8	499
Conveyance of Men, Goods & Messengers ..	301	8	309
Chemicals, Oil, Soap, &c.	287	103	390
Paper, Prints, Books and Stationery ..	1041	200	1241
Textile Fabrics, Hosiery	6522	2585	9107
Other Textile Manufactures	1245	812	2057
Dealers in Textiles, Drapers, &c... ..	469	96	565
Dress :—			
Tailors	1102	362	1464
Milliners and Dressmakers	1975	619	2594
Shirt Makers, Seamstresses	294	140	434
Boot, Shoe, Slipper, Patten, Clog Makers ..	5924	2867	8791
Other Workers	979	392	1371
Food, Tobacco, Drink, and Lodging ..	1953	1327	3280
All other Occupations	661	412	1073
Total Occupied	29699	11736	41435
Retired or Unoccupied ..	12833	34923	47756
Total, Occupied and Unoccupied (10 years old and upwards) ..	42532	46659	89191

TABLE XIX.

Primary Vaccinations Registered in Leicester, 1882-1908.

PRIMARY VACCINATIONS.				Total Number of Births.	No. of Exemptions granted.
Year.	Public.	Private.	Total.		
1882	1710	1396	3106	4856	...
1883	1203	755	1958	4787	...
1884	994	769	1763	4921	...
1885	908	934	1842	4652	...
1886	611	511	1122	4857	..
1887	196	275	471	4679	...
1888	72	242	314	4787	...
1889	27	145	172	4789	...
1890	12	119	131	4699	...
1891	6	86	92	4790	...
1892	12	121	133	5816	...
1893	44	205	249	6006	...
1894	29	104	133	5995	...
1895	12	63	75	5692	...
1896	19	67	86	6212	...
1897	11	70	81	6252	...
1898	12	80	92	6152	...
1899	56	100	156	6273	167
1900	155	188	343	6207	598
1901	148	209	357	6169	500
1902	770	467	1237	6313	1500
1903	1859	628	2487	6018	1029
1904	753	529	1232	5981	1041
1905	378	609	987	5888	1112
1906	401	672	1073	5865	1080
1907	474	619	1093	5181	1256
1908	161	498	659	5680	2401

TABLE XX.

Table showing the Number of Deaths from Tubercular Diseases in Leicester in the past Twenty Years.

Year.	Phthisis.	Tabes Mesenterica.	Tubercular Meningitis.	Other Tubercular Diseases†	Total Tubercular Deaths.	Deaths per 1000 Population living.
1889	178	21	13	23	235	1·5
1890	197	15	26	29	267	1·7
1891	181	11	34	24	250	1·4
*1892	216	21	65	38	340	1·8
1893	250	17	83	40	390	2·1
1894	207	14	59	31	311	1·6
1895	189	21	80	40	330	1·7
1896	220	10	69	44	348	1·7
1897	215	16	73	44	343	1·7
1898	221	17	83	37	358	1·7
1899	202	18	81	30	331	1·5
1900	230	8	91	45	374	1·7
1901	271	15	62	3	351	1·6
1902	272	9	77	0	358	1·6
1903	266	7	101	3	377	1·7
1904	353	8	78	10	449	2·00
1905	288	10	63	14	375	1·64
1906	339	7	56	8	410	1·76
1907	275	5	70	24	374	1·58
1908	287	5	83	16	391	1·62

* The figures after the year 1891 refer to the extended Borough of Leicester.

† The apparent diminution in the number of deaths from "Other Tubercular Diseases" since 1901 is due to an alteration in classification, many deaths being allocated to the other headings, chiefly to "Phthisis." This largely accounts for the apparent increase in "Phthisis" in recent years.

TABLE XXI.

Age and Sex Distribution of Deaths from Phthisis in 1908.

Age Period.		Males.	Females.	Total.
0 to 5	...	2	1	3
5 ,, 10	...	2	3	5
10 ,, 20	...	9	18	27
20 ,, 30	...	49	37	86
30 ,, 40	...	40	29	69
40 ,, 50	..	23	22	45
50 ,, 60	..	35	9	44
60 ,, 70	...	4	1	5
70 ,, 80	...	2	0	2
Over 80	...	1	0	1
Total	...	167	120	287

Occupations of Persons Dying from Phthisis in 1908.

	M.	F.
SHOE TRADE:		
Finishers	23	...
Clickers	15	...
Rivetters	5	...
Pressmen	6	...
Machinists	...	2
Warehousemen ...	2	...
Various	10	2
Total in Shoes ...	61	4
Hosiery Trade* ...	12	18
Tailoring Trade ...	2	3
Shopkeepers	5	...
Labourers	10	...
Clerks	4	...
Grooms	1	...
Printers	3	...
Cigar Hands	...	1
Butchers	2	...

	M.	F.
Bricklayers	2	...
Carpenters	5	...
House Decorators ...	3	...
Warehousemen ...	6	..
Mechanics	5	...
Cardboard Box Hands ...		1
Vanmen	4	...
Gardeners	4	...
Stokers...	3	...
Porters	3	...
Stonemasons	1	...
Various	21	12
Occupations not stated (includes Married Women, Widows, Children, and Persons of no occupation)	10	81
Total	167	120

* A large number of *married* women are engaged in the Hosiery Trade, but these are not included, for in the case of deaths of married women and widows, only the husband's occupation is registered.

TABLE XXII.

Deaths in each Ward from Phthisis during the Ten Years, 1899-1908.

No. of Ward.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	Total Deaths from Phthisis in 10 years.	Average Annual Mortality.
1. St. Martin's	1	2	0	3	6	7	5	8	2	4	38	1·29
2. Newton	7	20	21	5	7	18	20	23	12	17	150	1·65
3. St. Margaret's	17	15	6	17	21	27	24	29	20	19	195	1·43
4. Wyggeston ...	12	18	19	23	29	35	30	31	26	31	254	1·78
5. Latimer	14	18	31	19	26	35	26	25	32	24	250	1·47
6. Charnwood	10	7	8	6	10	16	17	19	15	11	119	1·33
7. Wycliffe	7	10	16	13	13	14	15	15	24	18	145	1·43
8. De Montfort	2	6	6	3	8	12	9	14	5	3	68	·93
9. The Castle	20	23	28	28	16	21	19	29	19	19	222	1·59
10. Westcotes	12	10	12	19	19	25	18	23	12	17	167	·71
11. The Abbey	18	14	21	17	14	19	19	25	35	33	215	1·07
12. Belgrave	10	17	15	10	8	13	13	26	20	18	150	·93
13. West Humberstone ...	15	13	20	13	8	8	2	11	21	13	124	·72
14. Spinney Hill	15	18	25	25	22	25	15	20	18	21	204	·82
15. Knighton	4	6	9	19	6	10	7	9	6	8	84	·56
16 Aylestone	6	4	13	15	18	24	14	17	6	19	136	1·20
Union Workhouse ...	30	27	16	32	28	33	23	10	...	...	199	...
Borough Asylum ...	2	2	5	5	7	11	12	5	2	12	63	...
Total	202	230	271	272	266	353	288	339	275	287	2783	1·16
General Infirmary ...	2	5	8	11	4	6	6	9	2	2	55	...
Poor Law Infirmary ...	..	...	...	...	...	...	...	..	36	30	66	...

N.B.—The deaths from Phthisis occurring at the Union Workhouse and at the Borough Asylum have been subtracted from Wycliffe and West Humberstone Wards respectively but have not been distributed: whilst the deaths occuring at the General and Poor Law Infirmaries have been distributed to the wards to which the persons belonged.

TABLE XXIII.

Scarlet Fever Statistics.

Year.	Actual Numbers Recorded.			Rates.				
	Deaths.	Cases Notified	Cases removed to Hospital	Deaths per 100,000 Pop.	Cases Notified per 50,000 Pop.	Cases Removed to Hospital per 50,000 Pop.	Per-centage removed to Hospital	Per-centage Fatality.
1877	33	...	38	29·6	...	17·1	...	...
1878	12	...	51	10·5	...	22·3	...	...
1879	105	...	247	89·9	...	105·5	...	...
1880	119	802	230	99·1	334·1	95·8	28·6	14·8
1881	184	1065	388	149·5	432·9	157·7	36·4	17·2
1882	72	763	460	57·1	302·7	182·5	60·2	9·4
1883	91	797	383	70·3	308·9	148·4	48·0	11·4
1884	63	701	354	47·5	263·5	133·1	50·4	8·9
1885	113	1816	900	82·9	667·6	330·8	49·5	6·2
1886	41	817	439	31·5	291·7	156·7	53·7	5·3
1887	5	272	151	3·5	95·1	52·7	55·5	1·8
1888	4	132	94	2·7	44·8	31·9	71·2	3·0
1889	6	409	327	3·9	136·3	109·0	79·9	1·4
1890	38	516	471	24·6	167·5	152·9	91·2	7·3
1891	17	794	636	9·6	224·2	179·6	80·1	2·1
1892	41	1331	733	22·6	367·6	202·4	55·0	3·0
1893	81	2308	none	14·0	627·1	none	none	3·5
1894	30	855	413	16·0	228·6	110·4	48·3	3·5
1895	15	723	445	7·8	189·2	116·4	61·5	2·0
1896	48	2110	1008	21·7	543·8	259·7	47·7	2·2
1897	73	1645	1048	36·8	415·4	264·6	63·7	4·4
1898	44	923	699	21·8	229·6	173·8	75·7	4·7
1899	42	1247	866	20·5	305·6	212·2	69·4	3·3
1900	28	839	574	13·3	200·7	137·3	68·4	3·3
1901	6	758	485	2·9	178·7	114·3	63·9	·7
1902	11	826	579	5·0	191·2	134·0	70·0	1·3
1903	15	533	130	6·8	121·1	29·5	24·3	2·8
1904	4	554	239	1·7	123·6	53·3	43·1	·7
1905	36	1117	739	15·8	244·9	162·0	66·1	3·2
1906	52	2301	1471	22·4	495·9	317·0	63·9	2·2
1907	41	1710	1196	18·6	362·3	253·2	69·9	2·5
1908	29	1206	869	12·0	251·2	181·0	72·0	2·4

	1896-99	1905-8
Average attack rate per 1000 population	7·4	6·7

TABLE XXIV.

MEASLES.—Deaths and Rates in past years.

Year.	Measles.—Deaths.	Rate per 1,000 population.	Quinquennial average.
1880	166	1·383	·514
1881	7	·056	
1882	74	·587	
1883	15	·116	
1884	57	·429	
1885	52	·382	·446
1886	43	·307	
1887	87	·609	
1888	77	·524	
1889	62	·410	
1890	30	·195	·443
1891	84	·474	
1892	126	·696	
1893	52	·282	
1894	106	·566	
1895	29	·152	·406
1896	120	·618	
1897	12	·060	
1898	211	1·049	
1899	31	·152	
1900	49	·234	·226
1901	17	·080	
1902	73	·338	
1903	74	·336	
1904	32	·143	
1905	53	·232	(4 years) ·381
1906	80	·344	
1907	60	·254	
1908	167	·695	

TABLE XXV.

List of REGISTERED MIDWIVES practising in Leicester. (February, 1909.)

Name.	Address.
Beck, Ann	9, Spinney Hill Road.
Ball, Emma	91½, Mount Road.
Brant, Elizabeth	29, Derwent Street.
*Buckler, Annie Elizabeth	16, Leicester Street.
Brooks, Elizabeth	16, Baker Street.
Carr, Mary	Fern Villa, Grace Road.
Chamberlain, Elizabeth	31, Upper Charles Street.
Chambers, Priscilla	31, Upper Charles Street.
†Duggan, Alice	167, Gresham Street.
Freer, Mary Ann	52, Marjorie Street.
Gibson, Agnes	6, Southgate Street.
*Gardner, Bertha	183, Melton Road.
Humpage, Sarah Ann	27, Abbey Gate.
†Howe, Alice Eliza	6, Princess Road.
†Hepplewhaite, Edith Mary	144, Narborough Road.
†Hutley, Maria	16, Glenfield Road.
*Harratt, Lizzie Annie	27, Ross's Walk.
Jones, Kate	82, Knighton Street.
Lappage, Mary Jane	21, Dunton Street
†McReynolds, Eliza	19, Baggrave Street.
Meason, Emma	21, Thornton Lane.
Monk, Elizabeth	75, Upper Conduit Street.
Morris, Elizabeth	4, Larch Street.
Plumb, Emily	157, Cranbourne Street.
Poulton, Emma	43, Willow Street
Russon, Emma	46, Moores Road
Shelley, Margaret	151, Syston Street.
Smith, Rosetta	17, Pool Road.
Seare, Maria A.	37, Victoria Road North.
Williams, Kate R.	8, Bulwer Road.
Weston, Adelaide	105, Grasmere Street.
Woodward, Charlotte	144, Walnut Street.
Walker, Emma	21, Percy Street.
*Watts, Emily	98, St. Saviour's Road.
†Wells, Emma	40, Conduit Street.
*Townsend, Harriet Ann	691, Aylestone Road.
Total	36.

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* Holds Certificate of Central Midwives' Board.

† Holds Certificate of London Obstetrical Society.

TABLE XXVI.

BOROUGH OF LEICESTER.

INFANTILE MORTALITY DURING THE YEAR 1908.

Deaths from stated Causes in Weeks and Months under One Year of Age.

	Cause of Death.	Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under 1 Year
	All Causes	134	23	38	17	212	92	67	51	58	38	46	46	37	36	29	25	737
i. Common Infectious Diseases	Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	...	...	...	...	...	...	...	1	2	...	1	4	5	6	7	8	34
	Scarlet Fever ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	Diphtheria (including Membranous Croup) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Whooping Cough .	...	...	...	1	1	1	...	3	1	2	1	2	4	3	...	...	18
ii. Diarrhoeal Diseases	Diarrhœa, all forms ...	...	...	2	1	3	14	13	13	11	13	14	5	8	4	2	3	103
	Enteritis, Muco-enteritis, Gastro-enteritis ...	1	...	1	1	3	3	6	5	10	3	3	3	3	2	2	2	45
	Gastritis, Gastro-intestinal Catarrh	...	...	...		...	...	2	...	1	...	2	2	1	1	...	...	9
iii. Wasting Diseases	Premature Birth ..	80	9	13	3	105	8	...	...	...	...	...	...		...	...	...	113
	Congenital Defects ..	6	2	2	...	10	1	1	...	...	...	...	1	...	...	...	...	13
	Injury at Birth ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Want of Breast-milk Starvation	...		...		...	...	...	...	...	...	...	...		...	...	...	...
	Atrophy, Debility, Marasmus ..	17	3	9	1	30	26	12	15	9	5	4	5	3	1	3	...	113
iv. Tuberculous Diseases	Tuberculous Meningitis			...	...		2	5	1	2	...	4	3	3	2		...	22
	Tuberculous Peritonitis Tabes Mesenterica ...	...	...	...			...	3	1	...	1	...	...	...	...	...	...	5
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	3
v. Other Causes	Erysipelas			...		...	...	...	...	...	...	1	...	...	...	...	...	1
	Syphilis	1	1	3		5	1	1	...	...	...	1	...	...	...	...	...	8
	Rickets	...	...	...	...	...	...	...	1	1	...	2	...	1	1	...	...	6
	Meningitis (*not Tuberculo's*)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Convulsions	7	4	3	3	17	17	9	5	8	6	3	9	1	5	4	2	86
	Bronchitis	...	...	3	1	4	5	3	...	3	1	1	4	2	6	3	1	33
	Laryngitis	...	...	...		...	1	1	...	...	...	1	...	...	...	...	...	3
	Pneumonia	...	...	1	1	2	3	6	3	5	6	4	6	4	2	7	7	55
	Suffocation, overlying ...	1	...	.	1	2	5	1	2	...	...	1	...	...	...	...	...	11
	Other Causes	20	4	1	4	29	4	4	1	3	2	1	1	2	3	1	2	53
	Murder	1			.	1		...	...	.	...	.	...	...	...	...	..	1
	Manslaughter ...	...	...	...	...	...		...	...	...	...	1	...	...	...	...	...	1

Population estimated to middle of 1908 ... 240,172.

Births in the Year { legitimate, 5,453. illegitimate, 227.

Deaths in the Year of { legitimate infants, 671. illegitimate infants, 66.

Deaths from all Causes at all Ages ... 3,119.

TABLE XXVI (a).

Infantile Mortality during 1908. An abridged form of the preceding.

Cause of Death.	Under 1 month	0 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	Total deaths under 1 year
All Causes	212 = 28·7 per cent.	371 = 50·3 per cent.	147 = 19·9 per cent.	129 = 17·5 per cent.	90 = 12·2 per cent.	737
Common Infectious Diseases	1	3	9	17	24	53
Diarrhœal Diseases... ...	6	44	56	41	16	157
Premature Birth	105	113	..	...	...	113
Congenital Defects... ...	10	12	...	1	...	13
Atrophy, Debility, Marasmus	30	68	29	12	4	113
Tuberculous Diseases ...	0	10	6	12	2	30
Convulsions...	17	43	19	13	11	86
Bronchitis and Pneumonia ..	6	23	18	21	26	88
All other Causes	37	55	10	12	7	84

TABLE XXVII.

Number of Persons living at different Age Periods in Borough of Leicester.

	All Ages.	Under 1 year	Under 5 years	5	10	15	20	30	40	50	60	70	80	90
Census, 1891 ...	174,624	4,780	21,749	20,331	19,574	18,818	32,212	23,812	17,013	10,976	6,560	3,003	544	32
Census, 1901 ...	211,579	5,273	24,266	21,873	21,431	22,224	41,519	30,405	22,400	14,586	8,377	3,680	773	45

Proportion of Persons living at different Age Periods in Borough of Leicester

(expressed as percentage of total population).

	All Ages	Under 1 year	Under 5 years	5	10	15	20	30	40	50	60	70	80	90
Census, 1891 ...	100·0	2·7	12·4	11·6	11·2	10·8	18·4	13·7	9·7	6·3	3 8	1·7	·31	·02
Census, 1901 ...	100·0	2·5	11·4	10·3	10·1	10 5	19·6	14·3	10·6	6·8	3·9	1·7	·36	02

TABLE XXVIII.

Family History of Phthisis Cases Investigated, 1904-8.

1 Year.	2 With history of Consumptive Parent.	3 With history of Consumptive Brother or Sister.	4 With history of both Consumptive Parent and Brother or Sister.	5 Neither Parent nor Brother or Sister Consumptive.	6 Total Cases Investigated.
1904	21	31	12	112	176
1905	31	39	8	164	242
1906	9	27	18	106	160
1907	20	36	12	120	188
1908	32	29	16	113	190
Total ...	113	162	66	615	956
Percentage ...	11·8	16·9	6·9	64·3	100·0

By adding Column 4 to Columns 2 and 3 respectively we find that 18·7 per cent. of the cases investigated gave a history of having had a consumptive parent; and 23·8 per cent. of having had a consumptive brother or sister. In round figures, one-fifth have had a consumptive parent; one-fifth have had a consumptive brother or sister; and three-fifths have had neither parent nor brother or sister affected.

MORTALITY TABLE.

CLASSIFICATION OF DEATHS IN 1908 ACCORDING TO CAUSE.

MORTALITY TABLE.

Deaths in the Borough of Leicester during the 52 Weeks ending December 31st, 1908.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
CLASS I																						
SPECIFIC FEBRILE OR ZYMOTIC DISEASES.																						
1.—Miasmatic Diseases.																						
Smallpox— Vaccinated																						
Smallpox— Unvaccinated																						
Smallpox— Not known																						
Smallpox— Not stated																						
Including deaths at Borough Isolation Hospital.																						
Measles	18	16	64	62	82	78	3	4									3	4	85	82	167
Scarlet Fever		1	8	8	8	9	3	7		2							3	9	11	18	29
Diphtheria	1		1	1	2	1	4	2									4	2	6	3	9
Whooping Cough	11	7	3	8	14	15	1										1		15	15	30
Typhus Fever																					
Enteric or Typhoid Fever							3	2	2		1						6	2	6	2	8
Simple Continued Fever																					
Influenza							1		1	2	4	1	2	4			8	7	8	7	15
Epidemic Cerebro Spinal Fever				2		2				1								1		3	3
2.—Diarrhœal Diseases.																					
Dysentery																					
Diarrhœa	53	50	2	11	55	61					1	1		2			1	3	56	64	120
Cholera																					
3.—Malarial Diseases.																					
Ague																					
Remittent Fever																					
4. Zoogenous Diseases.																					
Cowpox, and Effects of Vaccination																					
Hydrophobia																					
Glanders																					
Splenic Fever																					

5.—Venereal Diseases.																					
Syphilis	6	2	...	...	6	2	...	...	...	...	...	1	...	...	...	...	...	1	6	3	9
Gonorrhœa, Stricture of Urethra	...	...	...	...	...	...	...	...	1	...	1	...	2	...	...	...	4	...	4	...	4
6.—Septic Diseases.																					
Erysipelas	1	...	1	...	2	...	...	...	...	...	2	...	1	...	...	...	3	...	5	...	5
Pyæmia, Septicæmia	...	...	...	...	...	...	1	1	1	3	...	...	...	...	...	...	2	4	2	4	6
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	...	2	2
CLASS II.	90	76	79	92	169	168	16	16	5	8	9	5	5	6	...	...	35	35	204	203	407
PARASITIC DISEASES.																					
Thrush and other Vegetable Parasitic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Worms, Hydatids, and other Animal Parasitic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
CLASS III.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
DIETIC DISEASES.																					
Want of Breast Milk, Starvation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purpura and Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alcoholism { *a.* Delirium Tremens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alcoholism { *b.* Intemperance	...	...	...	...	...	...	...	...	2	...	1	1	...	...	...	...	3	1	3	1	4
CLASS IV.	...	...	...	...	...	...	...	...	2	...	1	1	...	...	...	...	3	1	3	1	4
CONSTITUTIONAL DISEASES.																					
Rheumatic Fever	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	1
Rheumatism	...	...	...	1	...	1	1	1	...	...	...	...	...	3	...	...	1	4	1	5	6
Gout	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	2	...	2	2
Cancer, Malignant Disease	...	...	...	1	...	1	1	3	7	10	29	50	51	54	2	6	90	123	90	124	214
Cancrum Oris (Noma)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rickets	3	3	2	5	5	8	...	...	...	...	...	...	...	...	...	...	...	...	5	8	13

DEATHS—continued.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Tabes Mesenterica	3		1	1	4	1													4	1	5
Phthisis and Pulmonary Tuberculosis	1		1	1	2	1	11	21	89	66	58	31	6	1	1		165	119	167	120	287
Hydrocephalus and Tubercular Meningitis	10	12	15	16	25	28	12	13		2	3						15	15	40	43	83
Other forms of Tuberculosis and Tubercular Peritonitis, &c.	4	1	3	3	7	4	1		1		2	1					4	1	11	5	16
Scrofula																					
Anæmia, Chlorosis, Leucocythæmia								1			2	2	2	1			4	4	4	4	8
Diabetes									1	1	5	4	4	7	1		11	12	11	12	23
Other Constitutional Diseases	1				1					1	3	1	1				4	2	5	2	7
	22	16	22	28	44	44	26	39	98	81	102	90	64	67	4	6	294	283	338	327	665

CLASS V.

LOCAL DISEASES.

1.—Diseases of Nervous System.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Inflammation of Brain or Membranes									1		1		2				4		4		4
Apoplexy, Softening of Brain, Paralysis				1		1	1		3	1	21	25	48	54	7	8	80	88	80	89	169
Insanity, General Paralysis of Insane											1	1		1			1	2	1	2	3
Chorea										1								1		1	1
Epilepsy							2		2	4	4	2	1	1		1	9	8	9	8	17
Convulsions	50	36	9	7	59	43				1								1	59	44	103
Laryngismus Stridulus	1				1														1		1
Disease of Spinal Cord, Paraplegia, Paralysis Agitans...									1		1	2	2	3			4	5	4	5	9
Other Diseases of Nervous System											2	1		1			2	2	2	2	4

2.—Diseases of Organs of Circulation.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Pericarditis and Endocarditis							2		1	1	1		2	1	1		7	2	7	2	9
Heart Disease	11	7	2	4	13	11	3	4	14	16	41	38	69	76	7	20	134	154	147	165	312
Aneurism									1		4						5		5		5
Embolism, Thrombosis										1	1	4	1	3			2	8	2	8	10
Other Diseases of Blood Vessels			2		2					1	2						2	1	4	1	5

3.—Diseases of Respiratory Organs.																					
Laryngitis	1	2	......	1	1	3	2	......	......	......	......	......	......	......	......	......	2	......	3	3	6
Bronchitis	18	15	16	10	34	25	......	......	1	2	18	17	36	65	7	9	62	93	96	118	214
Pleurisy	......	......	......	......	......	......	......	......	......	......	1	......	1	......	......	......	2	......	2	......	2
Pneumonia	34	21	29	22	63	43	7	8	6	10	27	11	14	12	1	6	55	47	118	90	208
Asthma and Emphysema	......	......	......	......	......	......	......	......	......	1	2	1	1	4	2	......	5	6	5	6	11
Croup	......	......	1	......	1	......	......	......	......	......	......	......	......	......	......	......	......	......	1	......	1
Other Diseases of Respiratory Organs ..	......	......	......	1	......	1	......	......	......	1	......	......	......	......	......	......	......	1	......	2	2
4.—Diseases of Digestive Organs.																					
Gastritis	5	4	2	......	7	4	......	......	......	1	2	2	......	3	......	......	2	6	9	10	19
Other Diseases of Stomach...	1	1	......	......	1	1	1	......	1	......	......	......	......	1	1	......	3	1	4	2	6
Enteritis	23	22	3	7	26	29	1	......	1	1	1	3	......	1	......	......	3	5	29	34	63
Peritonitis	1	2	4	2	5	4	1	1	......	4	1	2	1	1	......	......	3	8	8	12	20
Ascites	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Obstructive Diseases of Intestines... ...	3	1	1	......	4	1	2	2	1	1	4	4	3	3	......	1	10	11	14	12	26
Fistula	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Pancreas Disease, etc.	......	......	......	......	......	......	......	......	......	1	1	......	......	......	......	......	1	1	1	1	2
Cirrhosis of Liver	......	......	......	......	......	......	......	......	2	......	5	8	5	3	......	......	12	11	12	11	23
Jaundice, and other Diseases of Liver ..	1	......	......	1	1	1	......	......	1	......	2	2	2	3	......	......	5	5	6	6	12
5.—Diseases of Urinary Organs.																					
Nephritis	1	2	5	......	6	2	......	1	4	6	5	5	17	12	......	......	26	24	32	26	58
Bright's Disease (Albuminuria)	......	......	......	......	......	......	1	1	......	......	8	......	4	2	2	1	15	4	15	4	19
Diseases of Bladder or Prostrate	......	......	......	......	......	......	......	......	......	......	......	......	2	......	2	......	4	......	4	......	4
Calculus (Stone)	......	......	......	......	......	......	......	......	1	1	1	......	......	......	......	......	2	1	2	1	3
Other Diseases of Urinary System... ...	......	......	......	......	......	......	2	......	3	4	2	1	15	2	1	......	23	7	23	7	30
6.—Diseases of Reproductive System.																					
(a) Organs of Generation.																					
Male Organs	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Female Organs	......	......	......	......	......	......	......	......	......	1	......	......	......	......	......	......	......	1	......	1	1

DEATHS—continued.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
(b) Of Parturition.																					
Abortion, Miscarriage																					
Puerperal Convulsions												1						1		1	1
Placenta Prævia, Flooding										2								2		2	2
Other Accidents of Childbirth								1		7		1						9		9	9
7.—Diseases of Integumentary System.																					
Phlegmon																					
Ulcer, Carbuncle									5	1			1				6	1	6	1	7
Other Diseases of Skin, etc.	1			1	1	1								1				1	1	2	3
8.—Diseases of Bones and Joints.																					
Caries and Necrosis								1				1						2		2	2
Anthritis, Ostitis, Periostitis			1		1		2	1			1		2			1	5	2	6	2	8
Other Diseases of Bones and Joints		1				1	1		1	4		2	1				3	6	3	7	10
9.—Diseases of Organs of Special Sense.																					
Ear, Eye, Nose	1				1						1						1		2		2
10.—Diseases of Lymphatic System, etc.																					
Lymphatics and Spleen			1		1									1				1	1	1	2
Bronchocele, Addison's Disease																					
Quinsy																					
	152	114	76	57	228	171	28	20	50	74	161	134	230	254	31	47	500	529	728	700	1428

CLASS VI.																					
DEVELOPMENTAL DISEASES.																					
Premature Birth	68	45	...	...	68	45	...	...	...	...	...	...	...	...	...	...	...	...	68	45	113
Atelectasis	6	3	...	...	6	3	...	...	...	...	...	...	...	...	...	...	...	...	6	3	9
Congenital Malformations	7	6	...	...	7	6	...	...	...	...	...	...	...	...	...	...	...	...	7	6	13
Teething	3	...	1	1	4	1	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5
Atrophy, Inanition, Debility	65	48	3	1	68	49	...	...	...	...	1	...	1	1	1	..	3	1	71	50	121
Old Age	...	...	...	...	...	...	...	...	...	...	1	2	40	56	38	68	79	126	79	126	205
	149	102	4	2	153	104	...	...	...	...	2	2	41	57	39	68	82	127	235	231	466
CLASS VII.																					
DEATHS FROM VIOLENCE.																					
1.—Accident or Negligence.																					
Fracture and Contusions	...	...	1	...	1	...	2	1	4	...	6	1	3	3	1	3	16	8	17	8	25
Gunshot Wounds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cut, Stab	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burns and Scalds	...	...	3	...	3	...	...	...	...	2	...	...	...	...	...	1	...	3	3	3	6
Poison..	...	...	...	1	...	1	...	1	...	...	1	2	3	...	...	...	4	3	4	4	8
Drowning	...	...	1	1	1	1	3	...	1	1	...	1	...	...	...	...	4	2	5	3	8
Suffocation	4	7	...	1	4	8	...	...	...	...	1	...	2	...	...	...	3	...	7	8	15
Otherwise	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.—Homicide.																					
Manslaughter...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Murder	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	2	...	2
3.—Suicide.	...	...	...	...	...	...	1	...	...	4	12	2	5	...	...	...	18	6	18	6	24
	5	7	5	3	10	10	7	2	5	7	20	6	13	3	1	4	46	22	56	32	88

DEATHS—continued.

	0 to 1		1 to 5		Under 5		5 to 20		20 to 40		40 to 60		60 to 80		80 and upwards.		Over 5		All Ages		Total.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
CLASS VIII. **DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.** (*e.g.*, Dropsy, Abscess, Tumour, Hæmorrhage, Mortification, Death from Natural Causes, &c.) … …	3	1	4	…	7	1	7	5	6	6	8	9	6	4	.....	2	27	26	34	27	61
	3	1	4	.....	7	1	7	5	6	6	8	9	6	4	.....	2	27	26	34	27	61
Class **I. Zymotic Diseases** … …	90	76	79	92	169	168	16	16	5	8	9	5	5	6	.....	.....	35	35	204	203	407
,, **II.—Parasitic Diseases** … …	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
,, **III.—Dietic Diseases** … …	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	1	1	.....	.....	.....	.....	3	1	3	1	4
,, **IV.—Constitutional Diseases** ..	22	16	22	28	44	44	26	39	98	81	102	90	64	67	4	6	294	283	338	327	665
,, **V.—Local Diseases** .. …	152	114	76	57	228	171	28	20	50	74	161	134	230	254	31	47	500	529	728	700	1428
,, **VI.—Developmental Diseases** …	149	102	4	2	153	104	.....	.....	.....	.....	2	2	41	57	39	68	82	127	235	231	466
,, **VII.—Violent Deaths** … …	5	7	5	3	10	10	7	2	5	7	20	6	13	3	1	4	46	22	56	32	88
,, **VIII.—Ill-Defined, &c.** …	3	1	4	…	7	1	7	5	6	6	8	9	6	4	.....	2	27	26	34	27	61
	421	316	190	182	611	498	84	82	166	176	303	247	359	391	75	127	987	1023	1598	1521	3119

INDEX.

PAGE
Ages of Persons Living .. 141
After-care of Consumptive Patients 42
Alcohol and Public Health .. 57
Analyst's Report 85
Area of Borough 7

Bacteriology 78
Bakehouses 54, 91
Births and Birth-rates .. 13
Birth-rate, Causes of Diminishing 13
Births, Notification of .. 55, 56

Cancer 17
Children Act 67
Consumption, *see* Phthisis .. 39
Cremation 63

Deaths and Death-rates .. 14
Deaths, Classification of .. 147
Deaths from Zymotic Disease 21
Death-rates in other Great Towns 15
Deaths in Different Wards .. 22
Deaths, Principal Causes of, in 1908 16
Deaths, Age Distribution of .. 18
Destructors 103
Diarrhœa 39
Diphtheria 28, 76
Disinfection 57
Dried Milk 71

Enteric Fever 29, 77
Erysipelas 38

Factory and Workshops Act 53
Food, Analysis of 85

Gifts to Hospital 79

Health Society, The .. 62
Home Work 53
Hospital Report 75
Houses Unfit for Habitation .. 58
Houses, Number of Inhabited .. 12
House Flies and Disease .. 64

Illegitimacy 13, 21
Infant Mortality .. 18, 22, 139
Infectious Disease 25
Inspector's Report 89
Infants' Milk Depot, The .. 69

Marriages 12
Measles 33, 137
Meat Inspectors' Report .. 99
Membranous Croup, *see* Diphtheria 28
Midwives, List of 138

PAGE
Medical Inspection of School Children 65
Midwives' Inspection .. 55
Midwives Act 54
Milk, Analysis of 85
Milk Depot Report 69
Milk, Dried 71
Milk and Tuberculosis .. 47
Mortality Table 143
Mussels 30

Notification of Infectious Disease 123
Notification of Births Act .. 55
Nuisances 92

Occupations 130
Offensive Trades 97

Phthisis 39, 77, 134
Phthisis and Family History .. 46, 142
Phthisis, Notification of .. 40
Phthisis, Hospital Treatment of 40
Phthisis, After History of .. 42
Population 11
Poverty and Public Health .. 58
Premature Birth 17
Prosecutions . .. 88, 100
Puerperal Fever 39, 55

Rateable Value of Borough .. 12
Refuse Disposal Report .. 101

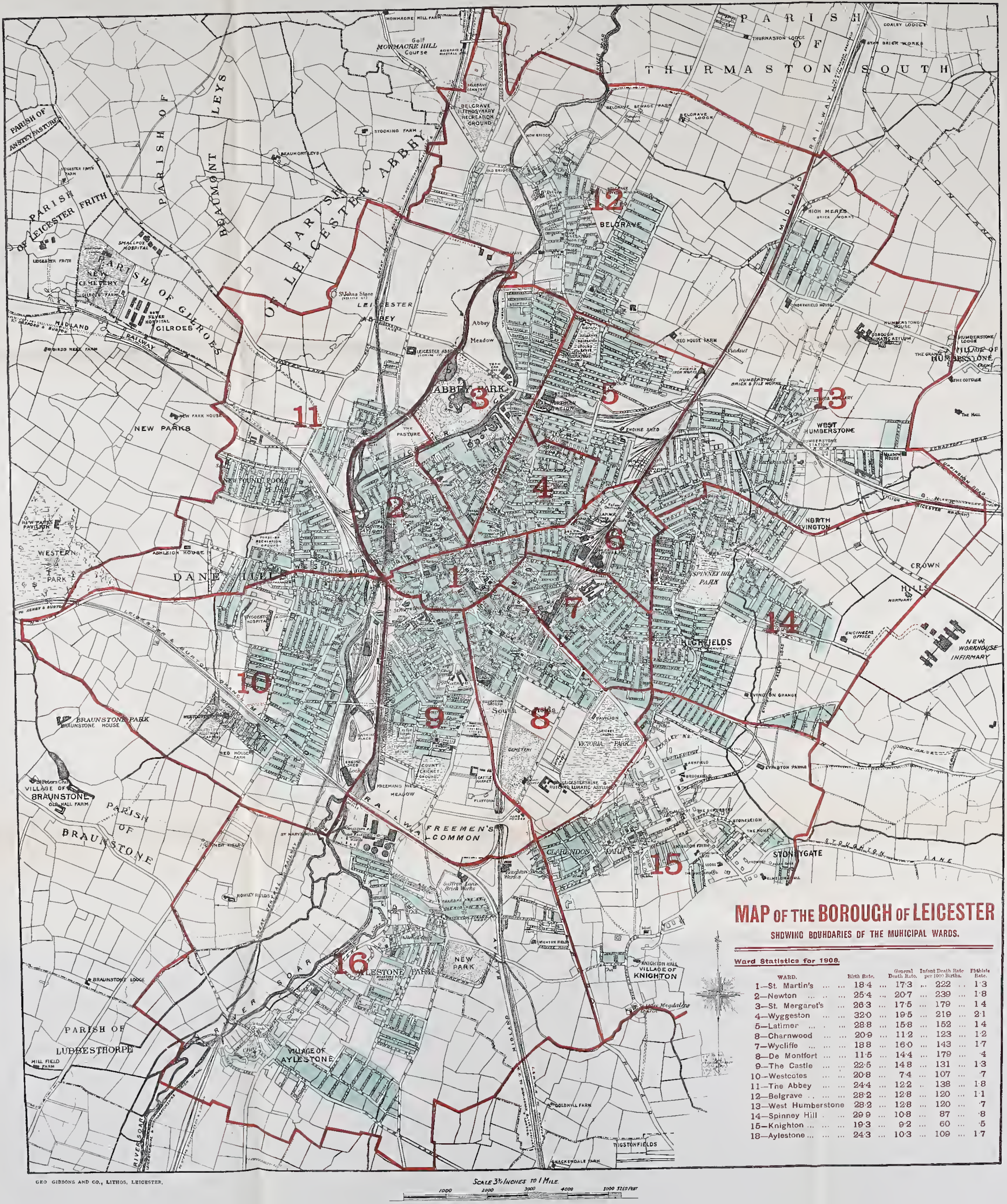
Scarlet Fever 27, 75
Scarlet Fever and Secondary Cases 28
Scarlet Fever Statistics .. 136
Slaughter Houses .. . 59
Smallpox 25
Sewage Disposal 60
Street Cleansing Report .. 105
Swimming Baths 59

Tuberculosis, Deaths from .. 133
Tuberculosis, Calmette's Test 47
Tuberculosis, Memorandum .. 49
Tuberculosis, Meat Condemned for 100
Typhoid Fever, *see* Enteric .. 29
Tuberculosis Regulations .. 48

Vaccination 25
Vaccination Statistics .. 132

Ward Statistics 22
Water Supply 59
Whooping Cough 38
Workmen's Compensation Act 61

Zymotic Disease .. . 35
Zymotic Mortality 21



MAP OF THE BOROUGH OF LEICESTER

SHOWING BOUNDARIES OF THE MUNICIPAL WARDS.

Ward Statistics for 1908.

WARD.	Birth Rate.	General Death Rate.	Infant Death Rate per 1000 Births.	Phthisis Rate.
1—St. Martin's … …	18·4 …	17·3 …	222 . .	1·3
2—Newton … .. …	25·4 …	20·7 …	239 …	1·8
3—St. Margaret's …	26·3 …	17·5 …	179 …	1·4
4—Wyggeston … …	32·0 …	19·5 …	219 …	2·1
5—Latimer … . …	28·8 …	15·8 …	152 …	1·4
8—Charnwood … …	20·9 …	11·2 …	123 …	1·2
7—Wycliffe … … …	18·8 …	16·0 …	143 …	1·7
8—De Montfort … …	11·5 …	14·4 …	179 …	·4
9—The Castle … …	22·5 …	14·8 …	131 …	1·3
10—Westcotes … …	20·8 …	7·4 …	107 …	·7
11—The Abbey … …	24·4 …	12·2 ..	138 …	1·8
12—Belgrave . . … …	28·2 …	12·8 …	120 …	1·1
13—West Humberstone	28·2 …	12·8 …	120 …	·7
14—Spinney Hill . …	29·9 …	10·8 …	87 …	·8
15—Knighton … … …	19·3 …	9·2 …	60 …	·5
18—Aylestone … … …	24·3 …	10·3 …	109 …	1·7

GEO GIBBONS AND CO., LITHOS, LEICESTER.